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CALENDAR FOR SEPTEMBER.

"Now Harvest's busy hum declines."

SEPTEMBER, though the first of the Autumnal Months, has an average heat scarcely less than that of June. For several years past, the severe summer droughts have extended even into September, and the first half of the month, both day and night, has been oppressively hot, the earth parched and cracked, and the foliage hard, dusty, and dry. This year is an exception, and vegetation has more the appearance of the vernal season, than that of the season of decay. The frequent summer showers have given great and constant activity to the growth of plants, and kept them in a green and vigorous condition, so that they now cover the earth with freshness and beauty.

Notwithstanding this, "the youth of the year is gone. Even the vigor and lustihood of its maturity are quick passing away. It has reached the summit of the hill, and is not only looking, but descending into the valley below. But if SEPTEMBER is not so bright with promise and so buoyant with hope as May, it is even more embued with that spirit of serene repose, in which the only true, because the only continuous enjoyment consists.—And SEPTEMBER is the month of consummations—the fulfiller of all promises—the fruition of all hopes—the era of all completeness. Let us then turn at once to gaze on, and partake in its manifold beauties and blessings, not let them pass us by, with the empty salutation of mere praise; for the only panegyric that is acceptable to Nature is that just appreciation of her gifts which consists in the full enjoyment of them."

Before the month closes, however, the general face of the country will have undergone a very material change since we left it last month; and none of its individual features, except the woods and groves, have improved in their appearance. Fields where the small grains were cut, present a rough appearance of coarse stubble, and weeds which have grown and ripened their seeds since the grain plants were harvested; others show the new furrows of the plow, or, perhaps, if criticized carefully, the young wheat or rye, just penetrating the surface, to come out and warm itself in the soft sunlight, and take root and gather strength to resist the winter frosts.

"And even now, whilst Nature's beauty dies,
Deposits SEED, and bids new harvests rise."

In other fields, milch cows and oxen are cropping the "fall feed," or quietly chewing the cud under the spreading branches of some friendly tree. But "the fields have no longer the rich luxuriance of their Spring bloom, nor even the delicious scent which belonged to them when the vigor of youth was upon them. They are the pale and feeble offspring of the declining life of their parent."

Some of the summer birds have left us, both songsters and others. The chatty martins have gone, and with the exception of here and there a pair, the swallows have departed—"urged thereto by prophetic instinct, which will not be disobeyed," and which makes them exact observers of times and seasons.

The vegetable garden "looks big with events," while the fruit garden is more tempting than ever. Crimson apples, golden pears, and luscious grapes more than repay the labor of cultivation in the health they promote and the gratification they impart while sharing them with friends.

SEPTEMBER will be like herself, after all.

"Glittering dews at morn and fogs at eve,
Hasten the gathering of the fruits of earth."

The leaves begin to fall, the meadows turn brown, frosts occasionally sparkle in the early sun, and the

beautifully varied tints appear among the leaves of the trees standing in low grounds.

So the month and seasons roll along, each peculiar to itself, and each presenting aspects and features more interesting at their own proper time than they possibly could be at any other season; and all proclaiming the benevolence of that Intelligence which has spoken them into existence, and which directs them all, even to the tiniest insect that dwells upon the dust of a flower.

In their succession and varied attractions, we must find sources of gratitude and joy; learn to avail ourselves of the opportunites which they present for our improvement, and fully appreciate the advantages which they present as they pass along.

"To me the meanest flower that blows can give
Thoughts that do often lie too deep for tears."

SEPTEMBER affords an opportunity for doing certain things which no other month can—there is *such* an opportunity. The farmer having secured his grain—all but the inimitable Indian corn harvest—his hay, his winter rye and winter wheat got *in*, and his piles of loam or muck for winter hauling got *out*, can afford to visit others and see how they manage their affairs. How wide and deep they plow, and what sort of implement the work is done with—how crops are planted and tended; how orchards are set and pruned; how reclaiming and drainage are managed; how milch cows, horses, oxen and swine appear compared with their own, and lastly, but by no means of the least consequence, how farmer Thrifty's wife manages her domestic concerns, and whether she has not a washing machine, and several other exceedingly convenient and not costly articles of furniture, which his own has not! Such a visit of observation as this, would be of a most pleasing as well as profitable character; and the wife and daughters may profit by it just as much. We hope September will be greatly improved by our friends in this manner.

If winter rye has been omitted, it may answer to get it in early this month.

Old grass land may be plowed and seeded to grass, though it were better done in August.

Swamps may be reclaimed and ditching done, where the land is sufficiently dry to admit of operations.

Meadow muck in abundance should be thrown out ready for winter hauling.

All the crops should be carefully harvested as they ripen: the potatoes sorted as they are collected, and those intended for seed kept by themselves.

Rank weeds that have been overlooked and gone to seed should be pulled, dried a little and burnt, to prevent their seeding the ground for another year.

Cutting the stalks of corn is preferable to letting them stand. Cut when the spindle is dead, and the edges of the leaves begin to be dry.

CORN-CARRYING ON THE RUSSIAN STEPPES.

In order to judge at what cost the most important of those exports are thus brought, and in order to enable an inquirer to predict with any approach to certainty what could be done under the pressure of the most extraordinary temptation from without, let us leave the sharp stones, deep mud, or clouds of dust of Odessa, and examine the tracts along which those long line of bullock wagons come creeking from more northerly directions. I have said that a vast belt of Steppe girdles this coast. We are upon a Steppe. The prevailing color, as far as the eye can reach over the immense plain, is a scorched brown. The intense heat and drought have reduced the Steppe to this condition, and far beyond the horizon line, and away, verst upon verst, is the same dreary looking and apparently waste expanse. Not that it is all flat—hills, barren and rugged, diversify the line, and add to its difficulties, in dry weather considerably, in wet incalculably. For look at the ground on which you stand. You are on one of the roads, as they are termed. Elsewhere, a road, good or bad, means something which has been *made*—a line, upon which has been gathered material for binding and clasping, and below which there is some kind of draining; bad or good, the road is, as compared with the adjacent land, dry, compact and elastic. Dismiss all such ideas from your mind, or rather drag your limbs for an hour behind that corn-wagon, and such ideas will disappear of themselves. Dead and helpless seems that wo-begone track, creaking and drawling over which comes the bullock-wagon—all wood, and built precisely as wagons were built a thousand years ago. The driver sits in front, occasionally lashing the gray bullocks more by way of form than with any idea of hastening them, and his massy heard hangs down over a species of censor, whence arise fumes of an unsavory kind. But it is not in luxury, or in imitation of his eastern neighbors, that the peasant keeps this odor-breathing vessel under his nose—the contents are an abominable mixture for greasing the wheels of his wagon, and by which you may trace it through many a yard of tainted air. Why he has placed the reeking vessel between his legs I know not, unless it be to remind himself more forcibly of the necessity of an operation, without the incessant performance of which his clumsily built cart would be on fire in four places at once. Contrast this wretched machine with the well contrived, iron mounted cart of the German colonist, a few miles hence. But on goes the wagoner, jolting and creaking along the unhelpful soil, and singing some of those old airs in which, rude as they are, there is some melody, or saying prayers to one or other of the multifarious national saints. On he goes, and so he and his predecessors have gone since corn was grown in Russia. Ricketty carts, knotted rope harness, drowsy bullock, wretched roads—so crawls the loaf towards the Englishman's table.—*Shirley Brooks, a Year in Russia.*

☞ The *Lexington (Mo.) Express* states, as the result of a careful inquiry, that the hemp crop of Lafayette county is inferior in quantity if not in quality, and that it will perhaps turn out more than than two-thirds or three-fourths of the amount usually produced.

For the New England Farmer.

SEEING THE CITY.

Country people who visit the city for the first time, usually go to the Common, the Navy Yard, the State House, the Monument, the Custom House, the Wharves, and a few other prominent points which their inclinations or their guides may suggest, during the day, and in the evening they visit the Museum, or some other place of amusement, or take a stroll in Washington Street by gas-light.—This done, they return home well satisfied that they have seen the city. And so indeed they have—that part of it which is "on exhibition." They saw the streets filled with well-dressed people, and the shops and stores they passed or entered, with genteel and polite men and women, who appeared to have plenty of leisure and plenty of money. They looked into windows of clear glass and of wonderful size, filled with gold and silver ware, rich crockery, costly silks, gay ribbons, gilded books, carved furniture, cutlery, carpetings, pictures—every thing that heart can wish or fancy conceive, until they wondered where the money is to come from to pay for all these things. They heard the noise and bustle of the crowded streets, and looked upon the whirl of the moving multitude, till the very stones of the pavements and the bricks of the buildings, like the people on the side-walk, seemed conscious that they were city bricks and city stones, and proud of the part they were playing in this animating scene.—They gazed at the residences on Beacon Street or Pemberton Square, with their swelled fronts and granite steps, and perhaps caught themselves contrasting their own humble homes with these princely mansions, and really felt a few twinges of envy down in some sly corner of the heart, or with a strange bitterness, suppressed the inquiry, Who maketh thee to differ from another?

In this way people generally see the city; in this way the city is made to be seen; and I am not sure that it ought to be seen in any other way.

The dark side, the opposite of all this glitter and show,—a degree of poverty and wretchedness as much below, as all this display of magnificence and wealth is above the real wants of our nature,—may be found hiding in the cellars and garrets of all great cities; but is so loathsome an exhibition desirable? would it do good? Is it not well that misery seeks retirement; and that the wretched and the vicious are content to pine or revel in obscurity?

Without any disposition, then, to set out the dark side of city life as an antidote against the tendencies of its bright side, I have often thought it would be an improvement on the usual style of city-seeing, were visitors allowed to gain some little knowledge of the way in which city mechanics and laboring people generally work and live.

For every well-dressed person that one sees playing the gentleman and lady, during a day's ramble in the streets of Boston, there are probably, at all times, within a stone's throw, a score or two of begrimmed mechanics of both sexes busy at work in shops "in the rear," "overhead," or "in the basement;" over the entrances to which is painted in large letters, "Positively no Admittance, except on business," an enactment, however, that, like other "prohibitory" laws in Boston, is enforced or not, as the "proprietors" see fit. Taking our curiosity as the "higher law," then, suppose we venture up that dirty flight of stairs jetted in there between the front windows of those two stores. Reaching the first landing, where are we? Two more flights, one to the right, the other to the left, lead to still higher "flights," while a passage-way directly forwards takes us through the front building into one in the rear that fronts on no street, but is entirely surrounded by and connected with buildings which do front on two or more streets, or "Places," as "headed-in" streets are often called. But I shall not have time to describe these various shops and offices, if we visit them, so we will merely read "The Directory of this Building," as it hangs, in the shape of a great sign, right before us. "No. 1, John Doe, Attorney and Counsellor at Law." "No. 2, Nathaniel Grinder, Dentist." These are the two front chambers, nicely carpeted, and away from the clatter of the engine, which is puffing away in the basement of the building. Then we have a Tailor's shop, a Manufacturing Jeweller, a Printing office or two, a Coffee-grinder, a Gold-beater, a Book-binder, a Carpenter's shop, &c. &c., in all some ten or fifteen different establishments occupy the five stories of which the building consists, and employ perhaps some hundreds of individuals of both sexes. Here men and women ply their busy tasks, with almost as little acquaintance with their fellow-laborers in other parts of the building, although passing and repassing the same threshold daily, as they have with people in other cities. And yet this swarming hive of city laborers presents a crystal front to the street, and perhaps a half-dozen starched clerks are the only representatives of this busy multitude that can be seen from the sidewalk.

High rent necessitates the economy of room; and operatives are consequently crowded into the smallest space consistent with the nature of their employment. Working almost entirely by the job or "piece," and incited by the example and weekly bills of the fastest workmen, a spirit of emulation is roused, and as a general thing, I believe hands work harder in large than in small companies—harder in the city than they do in the country, at the same business. The demand for money, likewise, to meet the higher rate of house-rent, and of almost every thing else, in the city, as well as the contagion of an almost universal example by all classes of a desperate effort to "keep up appearances," are among the extra spurs which the city furnishes to move the hands faster in the shop, and the feet faster in the streets, than they were wont to do in the country.

But I must close this article. My yarn has spun out beyond my expectations. I have not said any thing of how city mechanics live, and but little of what I intended to have said of how they work.—But perhaps enough to show that an opinion of city life and city employments, based upon what is to be seen in a day's walk through the principal streets, may be a very incorrect one.

Boston, July, 1855. A CITY MECHANIC.

HOME MADE CHLORIDE OF LIME.—Professor Nash says, take one barrel of lime, and one bushel of salt; dissolve the salt in as little water as will dissolve the whole; slack the lime with the water, putting on more than will dry slack it, so much that it will form a very thick paste; this will not take all the water; put on, therefore, a little of the remainder daily, until the lime has taken the whole. The result will be a sort of impure chloride of lime,

but a very powerful deodorizer, equal for all out-door purposes, with the article bought under that name at the apothecary's, and costing not one-twentieth part as much. This should be kept under a shed, or some out building. It should be kept moist, and it may be applied wherever offensive odors are generated, with the assurance that it will be effective to purify the air, and will add to the value of the manure much more than it costs. It would be well for every farmer to prepare a quantity of this, and have it always on hand.

For the New England Farmer.

THE BEAUTIFUL AND USEFUL.

MR. EDITOR:—Sir,—It is natural to the human mind to love the beautiful, and appreciate true worth. A departure from this rule, is perversion of taste, not nature. For instance, let a child grow to maturity, its mind become fully developed, and taught only as Nature would teach; that mind would become complete in native loveliness. The wood, the lawn, the vale, and meandering stream, would lend their magic charms to tranquillize the mind and point through Nature's loveliness to God, the originator, and beautifier of all. The ocean grand, the mountain bleak, the grotto wild, and deep ravine, with rocks of towering height, and mighty chasms, which exhibit the convulsive throes of Nature, in some momentous period, (a period prior to the knowledge of puny mortals, and far too comprehensive for human conception,) evince to that mind a God of power, might and majesty; and leads to deep adoration, as well as love.

Nature to me is beautiful in her contrasts as well as harmonies. I love to walk among her scenes, and be taken by surprise at some unexpected freak of her playful wildness. How tame and commonplace would she seem, did she work with geometrical precision; or with rule and compass always in hand. Neither can I perceive the consistency of her swelling each side the road, about one hundred yards therefrom, for the seat of our country residences, even to please so fastidious a taste as "Agricola's." When such is the case, I shall likewise expect that the taste of every man will be so changed, as to paint his house a soft "warm stone color," and flowers be all a "dappled grey," and nature and art one harmonious blending.

I love to see a taste for the beautiful displayed in the selection of ground, the arrangement of shrubbery, and the intermingling of lovely plats of flowers, surrounding our abodes with scenes of gay profusion; but the useful and the beautiful, it should always be borne in mind, will only give permanent pleasure. Or, in other words, we do not love to see a dwelling of rare loveliness embowered in beauty and bloom, with "Sheriff's Sale" written in conspicuous characters thereon; or to know the owner no longer calls it his. And should some "golden dreams" of the modern El Dorado cross his imagination, as the means of retrieving his shattered fortune, he be obliged to sneak, and crawl to some secluded corner, lest his creditors destroy his golden hopes.

Far be it from my humble efforts to retard the progress of the beautiful. Let her go hand in hand with usefulness. Let the farmer or mechanic of moderate means, when he purchases his abode, or erects his cottage home, do so with a just intention of beautifying it according to his means; (never beyond,) and I would suggest that instead of the forest, he select the various fruit trees to form his pleasant shades. They are as beautiful and fragrant in bloom, and as lovely to our vision, when their rich fruit combine with their deep green foliage. And many a blending and contrast can be formed by the right arrangement and commingling of their lighter and heavier foliage.

But mankind have different tastes; they act differently, and think differently; and will build houses differently. Nature has different arrangements. On some farms she has undulations, and some she has plains; I would not for myself have all cloud or all sun; but one thing I would desire, a fair representation of country residences, if representation be required; and truthfulness and honesty in all.

FLORA.

Fairhaven, 1855.

For the New England Farmer.

LETTER FROM THE HOMESTEAD.

BY H. F. FRENCH.

MY DEAR BROWN:—Of all the days in the year, give me a rainy day in haying time for attending to neglected duties in the way of writing. After days of hurry and heat and hard work and dust, of rising at daybreak and swinging the scythe while the dew is on the grass, of raking and pitching under a burning sun, of stowing away half-smothered under the eaves, comes this quiet, soothing rustle of the rain-drops on the leaves, when we awake in the morning. We give a half-sigh for the hay-cocks, but are easily consoled when we think of the corn and potatoes and the pastures; entirely resigned, when we recollect the scorching drought of last summer, and on further reflection, quite rejoiced that we have not the responsibility of taking care of the weather, which is managed so much better without our help.

When I say *we* in these preliminaries, I intend to include a part of "the rest of mankind," for candor compels me to admit that as a strictly personal remark, there is a slight figure of speech in that allusion to the scythe in the dewy grass, for though I have mowed a handsome swath in my day, I have found it more consistent with other duties, of late, to see other hands perform that labor. Still, the rain brings leisure from out-door cares, and as dog-day weather is too hot for severe studies, even in the way of agriculture, we will lay aside the abstruser matters of soil analysis, of superphosphates and chemical affinities, and discourse of familiar matters better suited to the weather and the season of haste and heat.

You see that I date once more at Old Chester, and the Homestead, where we are seeking health and repose for one who has been almost overcome in life's battle; hoping for strength in the clear sky and pure air of an inland and hilly position.

A gentleman of much observation, whose wife was suffering for years with some affection of the lungs, who had travelled with her for her health

through Europe, and finally buried her in Florida, recently expressed to me his thorough conviction that no region in the whole world affords at any season a more beautiful and healthful climate than this part of New England in summer. "Italy itself," said he, "has not a clearer sky nor a purer atmosphere, and they who wander abroad in search of health, at any season, find only suffering and disappointment."

How rational men and women from the cities can be persuaded to pass the summer at the beaches and fashionable watering-places, parading round on the sea-shore without shelter or shade of any green thing, suffering the tortures of Regulus, who was exposed by his enemies to the noon-day sun with his eyelids cut off—how they can endure the glare of the ball-room in dog-days, and the crowded chambers of fashionable hotels, not to mention the killing conclusion by way of paying the bills—how all this can be translated into pleasure by rational people, when the peaceful, quiet hills and valleys of the country invite them to health and freedom from restraints of fashion and artificial life, passes comprehension.

But to return to the Homestead. Fourteen years almost have elapsed, since professional ambition, or, perhaps, rather, the necessity of earning my living, called me from my native town, and this is my first return except as a transient visitor.

If I could assemble all the boys of New England together in this old village, and show them the trees that my own hands have planted and assisted others in planting, no doubt a score of years would witness such an improvement in the streets of our towns as no mere talking or writing can accomplish. Twenty-five years ago or thereabouts, the old Lombardy poplars which had been planted about the paternal mansion when it was built, in the first years of the century, were decayed so as to be no longer an ornament, and were cut down. There stood the tall, white three-story house close to the street, with only a few lilacs and roses to shelter it. Now, as you approach the mansion on either side, no glimpse of it, except of a chimney-top, or of a window or door, where the branches have been cut away, can be seen. The rock maples and horse-chestnuts and elms have interlaced their boughs and lifted their heads so as completely to shelter it. A quarter of a century has sufficed to increase the trees which a boy could carry on his shoulder to a foot or more in diameter. Yesterday I fixed a swing for my children upon a chestnut which grew from a nut which I saw my father plant in the garden, and which I transplanted to its present place some twenty years ago. The street is lined for half a mile with elms and maples which we boys of the village with our own hands dug from the rocky soil of the forests and planted. Now they are the beauty and glory of the place.

No man ever yet I think repented that he planted a shade tree by the way-side. Nothing has so civilizing an influence upon the habits of children, as this taste for nature's products. I confess for myself and the generation of boys of my time, that though we were tolerably civilized in our notions about trees, the fashion of the day paid little respect to birds and beasts. With us, a squirrel was made to be trapped and drowned, and a bird as a general thing was made to be shot. Bounties on crows and blackbirds were the only legislative aids to agriculture, and box-traps and cross-bows were good enough for chip-munks. But, perhaps it may as well be confessed, without much encouragement from the paternal side, we find a different spirit among our children. The robin's nest, almost within reach of their chamber window, has been watched from day to day, and the number of eggs reported to the family. The young have hatched and grown up and flown away unmolested. Pieces of thread and cotton have been hung on the fences for the good robins to weave into their nests. A red squirrel is seen hourly jumping from tree to tree, or running over the front-yard fence, and the children have a hole in an apple tree, where they place nuts and other luxuries for him to carry away.

The kitten is a great pet, but yesterday she caught a striped squirrel which has taken up his abode in the wood-pile at the door. She marched into the kitchen with a most triumphant air, with her victim in her mouth, expecting, doubtless, as much commendation as if she had taken the largest rat in the cellar; but alas, no administration, with a Nebraska bill in its teeth, ever met more general reprobation. Brooms and dish-cloths, with an accompaniment of shouts, and a general rush of the small folks upon the astonished favorite, soon convinced her that she had fallen into some error of taste or judgment, and she was compelled to seek safety in flight, dropping the little striper unhurt by the way, and taking refuge for herself under the wood-shed, till the wrath of the people subsided.

On the whole, this is the true education for children. He who loves the works of God is near to loving Him.

"He prayeth best who loveth best
All things both great and small,
For the dear God who loveth us,
He made and loveth all."

Perhaps it is possible to rear children in cities, with pure tastes and healthful ideas of the duties and objects of life. Perhaps the boys may escape the conviction that money is the one thing needful, and the girls, that dress and the opera are above all price, and that the chief end of woman is to excite admiration in a waltz, but surely the country is the true school for healthy development of body, mind and heart, and let us who live on the farms,

never complain that our lots are not "cast in pleasant places," and that we have "not a goodly heritage." H. F. P.

Chester, N. H., July, 1855.

A WORD ABOUT STUMPS.

Some things, according to King Solomon, are enough *to make "a wise man mad."* I know not whether it be wise or unwise, but I have often been vexed with STUMPS, with whole fields of stumps, and sometimes with even one, which has stood like a lubber, right in my way, to bruise toes or hurl my wheel aside. I have a grudge against these deformities, which I may carry too far. I was riding years ago in Ohio, a stump capsized the stage and crippled me for months, and there my grudge began. Riding awhile after in a stormy night, the stageman planted his axle flat on the top of a huge pine stump, which stood then, and I dare say, stands now right in the centre of a Western road; this led to hard words between driver and "all hands," and my grudge was confirmed. We are an amazing free people, we love and hate what we please. Some men love their deformities, and some farmers seem to love their stumps, and bequeath them as heir looms to their children. *De gustibus non est disputandum.* I marvel, however, at their taste. It reminds me of the young lady, who on a warm night in August, said she could "not see for her life why people so much object to the smell of a skunk!" Some wonder why I object to stumps, whilst others, I am happy to say, are in full sympathy with me.

I am glad to see evidence, that here and there a farmer is *"stirring his stumps."* I have just seen the exploits of Mr. WILLIS' STUMP EXTRACTOR, at Orange, Mass., where he has began to manufacture the article on a large scale.

I am satisfied this machine has *prodigious power.* One of common size, it is computed, has a purchase of 336 tons, and this it seems may be increased almost beyond computation, so as to hurl out the biggest monster imbedded in the soil!

I am satisfied, it can be worked very rapidly. Three men can do as much work with it, as fifty or perhaps a hundred can do without it. Well worked, I am told, it will turn out a lusty stump each ten minutes, hour by hour. I am satisfied this machine is much needed, even in New England, and still more in the Middle, Southern and Western States. It has made many fields lawn-like and beautiful, in and around Orange, and if brought into requisition, it can do the same from Maine to Georgia. The cost is something, but not frightful. A good machine, with the exclusive right to use it in any one town in the union, costs $150 or $200, no more. This is less than the price of a Piano, less than the price of the gold watch, with "fixins," which dangle from the pocket of many a fop! One machine may serve a whole town; and a tax of $200 levied on a score of enterprising farmers, would be no killing affair. One young man in a town hard by me, has made purchase, and is now working the machine day by day at a clean profit, of from $3 to $5. What work, what sport is more lively and amusing than "ousting" stumps? What agricultural work will pay half as well?

A man is blind, he needs a candle at noon-day, who does not see that he had better pay for a machine from his own purse, and give the use of it to his neighbors, than have a half a dozen acres of his best fields occupied and defaced with stumps all the days of his life. $200 will place this machine and town right within the reach of every group of respectable farmers, hence stumps have now no such right to mar "fair creation," as in past times.

I think Mr. Willis, the patentee, a benefactor; his patent will make rough places smooth, make two, yes, ten thousand spears of grass grow where but one grew before, and prove an element in the great progress of civilization.

A gentleman from Valparaiso, deputed by the Chilian government, has purchased four machines, which are now on their way to those semi-barbarous regions; it is to be hoped our excellent farmers will take the hint, apply this machine to some millions of stumps which pain our eyes on the right and left, wherever we travel. Gentlemen, "up and at um."—*Northern Sentinel.*

For the New England Farmer.

"LUNAR INFLUENCES."

MR. EDITOR:—Though not a subscriber to your very valuable paper, nor even being permitted to peruse its columns regularly, my eye rests occasionally on an article which attracts my attention. And among others, that series of articles which have appeared from the pens of different contributors, for a few weeks past, on "Lunar Influences," struck me as a question which may yet be one of interest and importance to the agriculturist. From actual experience I cannot say anything, and some may reject my remarks as of little value, citing the old adage: *"Experience is the best master."* Very well. But from the *known* fact of the "influence" of the moon on the tides, may we not reason from analogy that further investigations may bring to light influences operating on other substances? I am of the opinion that this way of treating anything new with ridicule, is, to say the least, a poor means for gaining one's point. "*," who writes in the *Farmer*, (July 7,) resorts to this means. He is most assuredly entitled to his *"opinions* heretofore entertained;" but his reference to the influence of the Pleiades, or of Orion, on the growing of Indian corn, is in my humble view supremely ridiculous. I think if "*" will have patience, that with the progress of the sciences something will be produced in connection with this topic which will be, if not *demonstrative*, yet *convincing*. We ought to use reason in all our researches after truth, and not be too bold in expressing our opinion till sufficient facts have been adduced to warrant an impartial decision. Let us wait, then, a "little longer," and see what further developments will do.

Mr. Editor, by inserting this you will greatly favor one interested in the cause of science and agriculture. "DELTA."

Chelsea, Mass., July 10, 1855.

REMARKS.—*Does* the moon affect the tides? We are more inclined to the belief that the tides are occasioned by the revolutions of the earth, emptying the contents of caverns into each other at stated periods, and of which Boston harbor is one. We have several articles under the same head as this, but doubt whether any of them would be profitable to the reader.

THE SKY-LARK.

Bird of the wilderness,
Blithesome and cumberless,
Sweet be thy matin o'er moorland and lea!
Emblem of happiness,
Blest be thy dwelling-place,
O, to abide in the desert with thee!
Wild is thy lay, and loud,
Far in the downy cloud,
Love gives it energy, love gave it birth.
Where, on thy dewy wing,
Where art thou journeying?
Thy lay is in heaven, thy love is on earth.

O'er fell and fountain sheen,
O'er moor and mountain green,
O'er the red streamer that heralds the day,
Over the cloudlet dim,
Over the rainbow's rim,
Musical cherub, soar, singing away!
Then when the gloaming comes,
Low in the heather blooms,
Sweet will thy welcome and bed of love be!
Emblem of happiness;
Blest is thy dwelling-place,
O, to abide in the desert with thee.

THE FARM SUPPORTS ALL.

People may reason and theorize about the comparative usefulness of different pursuits and occupations. We will not quarrel with any man, because he insists that a trader or broker is as useful a man as the farmer, but we *will* quarrel with any man in a gentlemanly way, who will not admit that the farmer's life does possess *as much* true dignity and utility as any other. We will, for civility's sake, admit equality, but can acknowledge no superiority.

Agriculture is the basis of all national prosperity. A child may see that if the earth is not cultivated, the whole population in a single year, or at most, in two years, when the cattle are consumed, must literally starve, while society could exist to an indefinite extent, were the labors of any other interest to cease at once. Observe the course of trade, and inquire of the merchants even in our own country, and we shall find, that upon the products of the soil does all the prosperity of trade depend. If the cotton crop is short, the southern trader cannot order goods from the North, or having ordered, fails, and cannot pay for them. He fails because the planter having fed to his negroes all his corn and bacon, has nothing left wherewith to pay for his family supplies. If the wheat crop fails, the Boston and New York merchants at once feel the effect of the failure, for the Western merchant cannot meet his liabilities, nor incur others.

When all things are prosperous, the farmer is almost forgotten. He labors hard and brings the product of his labor to a full market. He is met by sharp speculators with the cry, that the market is glutted and his supplies are not wanted, and is compelled, because he cannot enter into combinations to meet the banded monopolizers, to sell at a price which gives him but scanty pay for his industry. He feels that all the world is prosperous except himself, and the trading public, forgetful or careless that the farmer maintains and even produces all this prosperity by his quiet pursuits, look down upon him perhaps with contempt.

To be sure, he has at such times, in common with others, enough of food and clothing. He does not want, but his abundance and success seem to profit others more than himself. Indeed, he hardly participates in the general prosperity which his own hard work and watchful care has created.

But by-and-bye the scene changes. The crops are short in some sections of the country. Supplies are not forwarded to the great marts of trade for the adequate supply of the inhabitants of the cities themselves, or to meet the demands of commerce. Business is deranged, merchants fail, the country traders are discouraged, the whole country languishes, and there is a general cry of hard times. But the farmer does not fail. He raises his own food in abundance still. What he can spare brings him an increased price in the market. The traders and speculators come to his very doors, and entreat him to sell them at any price enough to meet the present necessities of their business. And so, when the earth is laid waste and labor diverted from its legitimate pursuits, by want. Then the farmer increases his exertions. He sows more broadly, he labors more earnestly. He feels that men in foreign lands, who are dragged by hard masters from their homes to engage in bloody battles, are dependent on him for their daily bread. Still his own supply is abundant, and others demand a share, and offer him a generous reward for his labor. The world, stupid as it often is, in times of general peace and prosperity, *now* appreciates the farmer's useful life. What then is the true position of the cultivation of the land? Is it one of hard work and servile labor only, or is it one of dignity and importance, indispensable at all times? Farming is doubtless hard work, in the general acceptation of the term, but it is a great mistake to call that only hard work, which is performed with the hands. The lawyer, confined to the stifling and crampt air of a court-room for days and weeks, with the property and lives of his clients at stake, and dependent on his watchful, constant care; the minister, bound to his stated preaching, whether in health, or feeling himself sinking already under his harassing and never-ceasing responsibility; the doctor, called out at midnight to prescribe in an instant, in a new and doubtful case,—these have all their labor, harder work than any performed by the hands alone. Many farmers labor too severely, more so than there is any need of; but still, we think, their hardships are not so great as those incident to the professions we have named. They have, besides, what traders and speculators, and even mechanics, can never have, what is really a

source of more enjoyment than wealth can bring—they have *security for the future.* They plant and sow in faith, and with full assurance that the harvest will not fail. Railroad and bank stocks may rise or fall, the market for their own produce may be high or low, war or peace may prevail, free-trade or high duties may triumph, but they know that "God giveth the increase," and that they and theirs are dependent on Him alone. Young men make haste to be rich. They forsake their "paternal acres," and strive in doubtful paths to outstrip the fickle goddess, Fortune. As age brings reflection, and juster views of the true objects of life, most men place a higher value on the peaceful pursuits of agriculture. The repose and serenity of a farmer's life have charms for them, beyond riches, and all the pleasures wealth can buy.

Indeed, it is rare to find a merchant, or successful mechanic, who has in early life left his rural home for a life in the city, who does not look forward with pleasant anticipations to the day, when he shall return once more to his native hills, or at least to the occupation of a homestead, where his children may imbibe true ideas of the dignity and independence of a life on a farm.

This may seem a trite and common-place subject. We claim no originality for these thoughts, but it would seem that now, when wars are desolating the earth, when prices are paid in our markets that would indicate that famine must somewhere prevail, it would seem that now, both the farmer himself, in his independence of other men from the vicissitudes of life, and all others, in their dependence on him for daily food, might see and feel, what more than all else we would impress on all, that Agriculture is the foundation of national prosperity, and that the position of the farmer is entitled to be that of the highest honor.

For the New Englaud Farmer.

LABOR-SAVING MACHINERY.

The precautionary remarks of the editor of the *Massachusetts Ploughman*, in the paper of July 28, on the use of *Mowing Machines*, are well calculated to arrest the attention of farmers of less practical experience, and to awaken the inquiry, *who is right?* If it be true, as is asserted, that an individual will cut *four acres* of grass in a day, with a scythe, then there would seem to be no occasion for applying machinery to this purpose. Such individual labor has not come to our observation—*two acres* in a day being the extent that we have known to be mown by a single man. We had supposed that a machine, properly operated would cut *four times* as much as a man, and quite as well. In fact, we are entirely confident that ten or twelve acres, containing as many tons, can readily be cut in a day, by a single machine. This we know to be true, because we have seen it done the last week.

But, says the experienced editor, we tried one of these machines that came from Philadelphia, with the power of a pair of oxen, and it was "no go"—we had "to hitch on a horse to help it along." We can only say, that the machine he tried could not have been such as are now in use; because no one has occasion to halt for a moment, in the use of one of these machines, where the grass does not exceed two tons to the acre. We have never witnessed a stoppage of a machine by reason of the burden of grass. The editor further says, that two of his men will cut as much grass in a day, on fair labor, as one of these machines. In this we think the editor mistaken,—and that they will not cut more than *half as much.* We agree with the editor, that there is need of much improvement in these machines, to commend them to general favor; that they should be lighter, so as to be operated with less power; that they should be made of better materials, so as to be in less danger of breaking or giving out in the fields; and if possible, that they should be so made, as to be sold at half their present prices.—These improvements being adopted, we cannot doubt that *mowing machines* will ere long come into general use. A LOOKER-ON.

July 28, 1855.

For the New England Farmer.

MURIATE OF LIME.

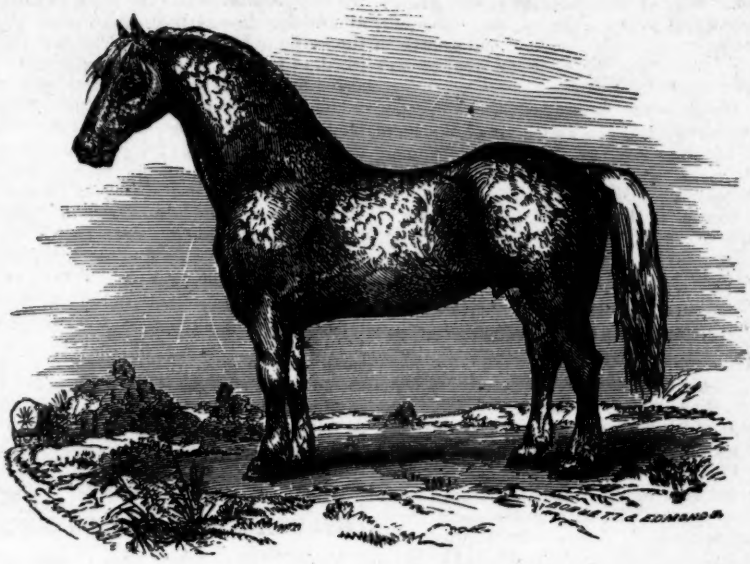
MR. EDITOR:—I noticed in your valuable journal an advertisement of muriate of lime. As some of your readers may not know the value of this manure, I have taken the liberty of sending you a few lines upon the subject, which, if you think worthy, you can insert in your paper.

This article has been already noticed in some of the journals of the day, as the best article for the destruction of the canker worm, which has committed such ravages upon our fruit trees during the past season. This is, however, only one of its virtues. The soil of meadow lands contains a large proportion of humic acid, which is one of the principal constituents of peat, muck, and different kinds of decayed vegetation. The heat of summer and cold of winter alike render this acid insoluble; in this state the nutritive matter cannot be absorbed by the plant. It is necessary, then, in cultivating meadow lands, or in making a compost with peat-muck or vegetable matter, to add some corrective, which will make this acid soluble, and capable of being assimilated by plants. The best chemists and vegetable physiologists tell us that the muriate of lime and the alkali formed from wood ashes, are the proper correctives. As the former is cheapest and easiest to be obtained, of course it is preferable.

Liebig, one the first agricultural chemists of the age, tells us that this salt (muriate of lime) retains all the ammonia which falls to the earth in the rain, consequently, if it is applied to the land in the fall, by spring it has not only its own fertilizing properties, but has received and is constantly receiving, an additional property, and the one which has rendered guano of so much value as a manure for so many years past.

For grass lands this is probably the best manure which has yet been discovered, and wherever it has been used the yield has been very abundant. Much more might be said of the value of this article, but I think sufficient has already been said to show that it is worth trying, and *why* it is so. If this should meet your approval, Mr. Editor, I may send you more on a similar subject. G. I. F.

Charlestown, Aug. 1, 1855.



MORGAN DRAFT HORSE CLYDE.

[Took the First Premium at the New York State Fair in 1852.]

For the New England Farmer.

WINTER WHEAT—CHESS GRASS.

Mr. Editor:—Yourself and your readers may think I have exhausted my subject long ago, but I wish you to understand, I am a martyr to the belief that *wheat is a legitimate crop of New England.* My own experience, and my correspondents from your region, confirm me in all I have said and written upon the subject. It would really seem a work of supererogation, in any one, to advise a farmer to raise his bread. He ought to know it, from promptings of self-interest. Certainly, the products of his farm are the bulwarks of his independence. The blacksmith should shoe his own horse, and the cordwainer should shoe his own children, yet they are often found barefooted. There is an inaptitude to realize *home wants.* Is it not so?

What a relief it must be to the farmer, to go to his granary and measure out his wheat for the mill, instead of going to "the store" and paying out $12 cash for a barrel of flour. What an improvident thing is all this, while God has given him spring and winter grains, commanding him to "till the ground," with the sure promise of "seed time and harvest." Who will have the hardihood to doubt?

The time for sowing winter wheat is nearly at hand. Be sure not to pass the middle of September; if put in the first week, so much the better. Worn-out mowing lands, and old pastures over-run with low laurel, (killamb,) hardhack, thistles, moss, &c., where fifty acres will scarcely keep a cow; wall off five acres, (pastures are generally good soil and stony,) and it will make fatlings of five cows; first, put in wheat, then laid down to a pasture. No soil so good as inverted sod for wheat; no plow so good as the double Eagle, which leaves the furrow so pulverized and broken, that the grain is buried deep enough to escape winter-kill, if sown on the furrow, using the cultivator or a loaded harrow.

Again, I have planted wheat from one to six inches deep. At six inches, it came up, but was feeble; at two, three and four inches, it headed out finely. If sowed early and put in two or three inches, (on deep plowing,) it will scarcely ever winter-kill on descending lands.

Sow 1½ bushels to the acre; soak twelve hours in a weak salt pickle, and rake it in dry ashes.—Ashes spread in the spring have a fine effect on it. What is gained in the autumn growth, is so much accomplished for the next spring. Root, and strength of blade is secured by early sowing.

I learn that chess grass has troubled you. It must have been by carelessness in seeding. It accumulates wonderfully. It properly may be called the "tares" among the wheat. The remedy is, *not to sow it,* and if it appears, pass through the grain and *pluck it up;* it resembles a tuft of oats. We hope to be enlightened upon this chess grass by some of your readers. It seems to be wedded to winter wheat, as if by matrimonial alliance.

Again permit me to say, that twenty-five per cent. of your unprofitable pasture lands put into wheat, would produce grain enough to bread the State of Massachusetts. Laid down to a pasture again with rich feed, the cow returns ten dollars

extra in milk, butter and cheese, the season, and adds to her own value and all other animals $5 to $10 each, showing the difference between poor and good feed. Why so much neglect of the *pasture*, while the *scaffold* is an object of such solicitude. The pasture should make the beef and growth of the young cattle; then why is it not the farmer's important revenue?

While the allies are farming out the destruction of Sebastopol with an open waste-gate of blood and treasure, the New England farmer may be more honorably and profitably engaged in subduing his tough old pasture lands, which will give him pleasure and revenue in the end. H. POOR.

HOW SHOT ARE MADE.

[The New York correspondent of the *Congregationalist* gives the following information on this subject:]

On one of the hottest days last week, as I was passing up Water Street on the shaded side, I noticed a gust of hot air from a store I was passing, which struck my cheek with the burning force of a sirocco. Curious to ascertain its origin, I entered the store and drew near the hatchway, from whence it seemed to proceed. Down from the stories above came pouring a shower of silver drops, which disappeared in the vapor from the apartment beneath. The gentleman who was standing near, perceiving my curiosity, thrust a stick beneath the white drops and drew it forth covered with melted lead. It was a manufactory of shot. The first method of making round shot, was by abrasion; a number of small rough chips or particles of lead were shaken together in a bag or box until they were worn into a spherical shape; or, from a sheet of lead, small cubical bits were separated with a punch, and ground between two flat stones, until they were rounded, as a pill is made between the palms of the hand.—The next process was by casting in a mould, as bullets are now made, but this, besides being slow and tedious, did not make the shot as perfect as desired. The latter method is by granulation, and hitherto this has been only practicable at the top of a high tower, or over a shaft sunk in the centre, so as to provide a vertical descent of 150 to 200 feet. The process is simply as follows: The lead is mixed with a little arsenic in a pot placed over a furnace. When it becomes melted it is poured by means of a ladle into a colander,—a vessel made like a sieve with holes in the bottom—which hangs over the space through which the shot are to fall. To prevent the lead passing through these holes too rapidly, a layer of dross taken from the surface of the molten metal is spread coarsely over them. Through the bottom of the colander the drops fall in a continuous shower, and after their long descent are received into a huge basin of water. This gives them their rounded form, almost all of the drops being perfect spheres. They are separated into their several sizes by shifting, after being thoroughly dried. A few, of course, from contact with others, and various similar accidents, will be imperfect. How shall they be separated from the mass? An inclined plane covered with iron is fastened with its lower edge in a box. Down this plane the shot are carelessly rolled in a thin stream. Those perfectly round acquire so much velocity that they bound off into a receiver at a little distance, while the imperfect fall into the box at the foot of the plane. Sometimes several grades are made. The most perfect are caught in one trough, the slightly imperfect in the next, a little nearer the plane, and so on to those almost shapeless particles which must go back to the kettle to be re-melted. The shot are then polished, as pins are, in a revolving barrel; in which also a little black lead is placed, to give them the peculiar finish they have when sold. I did not intend so lengthy a description when I began, although it may interest the juvenile portion of your readers, but to speak of the process of manufacture peculiar to the place I visited in Water Street.—There, the melted drops instead of falling from a high tower, or through a deep shaft, simply came from the hatchway of a four story building, used as a store, the shot being made and sold under the same roof. The necessity of the long space is obviated by forcing up against the falling shower a volume of air from a huge bellows worked by a small steam engine. This current of air so retards their descent that the shot are as perfect, in falling from the fourth floor of the store, as if they made an unobstructed journey of 200 feet.

For the New England Farmer.

IMPORTANCE OF SOWING GOOD SEED.

MR. EDITOR:—I have been a reader of agricultural papers for the last twenty years, and I like the *New England Farmer* about as well as any of them.

I am a practical farmer, on a small scale. Now it is generally agreed that liberal manuring and frequent stirring of the soil are essential to good farming. I think that good seed is also essential. I have read of large potatoes and small potatoes, and have seen them and planted them; but in relation to their relative value for seed the wise disagree. In fact there is but little difference.

Not so, however, with the grains; the best should be selected for seed to secure a continuation of good crops. A half-century ago, our most successful farmers were in the practice of selecting their seed at harvest time; the rye, barley and oats were winnowed on the barn-floor, and the seed for the coming year was taken from the head of the heap, because the grain was heavier, as they said, while those who took their seed from the tail of the heap, had to come to their wiser neighbors every few years for seed, saying "that their seed had run out." There was one man in particular, who selected his seed corn in his field, and at harvest time, having regard to the earliest ripe and the most perfect ears. Another man came to reside in his neighborhood and procured seed corn of this man, and adopted his manner of selecting it, which he continued with good success, so that in unfavorable seasons, when corn in many fields failed to ripen, and many procured seed from the North, this man continued to raise good crops from his own seed, and remarked that the good would perpetuate itself if properly nourished and cared for.

The same may be said in relation to garden vegetables. If proper attention were paid to the selection of seeds, we should not hear the complaints that we often do, that "the beans are late and all at the top of the poles," and the cucumbers all run to vines, or that the seed has "run out." E. S.

Somerset, Mass.

INJURY TO THE WHEAT CROP.

The heavy rains of the past fortnight are reported to have done great injury to the wheat crop in New York and Michigan. In many fields the grain is said to be sprouting in the field, and in some instances to have grown so badly as to be spoiled. The damage, however, is probably overestimated. The following paragraphs from the *New York Tribune*, give some facts in the case which are of interest, and which show that there is but little real cause for alarm:—

"Let us look at the prospect fairly. There is no disputing the fact that in all the wheat region north of lat. 41 degrees the wheat, either cut or uncut, is badly sprouted. How great the damage is it is difficult to determine, as farmers have no precedent to judge by, not having had such a season for several years. Indeed, we remember only one—it was in the year 1836, though the worst of wet weather came somewhat later.

"That year the wheat was mostly cut, and in shocks in the field or in stacks. In the great wheat regions of Ohio, Indiana and Illinois, the farmers quite generally declared the crop to be totally ruined. In some fields it did look so, for when it was uncut the yellow heads assumed a green shade, and the shocks and stalks became as green on the surface as the adjoining pastures. In due time, however, the raining period was over, the sprouts died, the standing grain was cut, the shocks stacked or threshed; the stacks lost their bright yellow hue and stood a rusty-looking mass of dry, weather-beaten straw; and yet—mark the result—the wheat inside was as bright and sound as ever. So slight was the injury that it was hardly perceptible in the final result. The shocks and standing grain were more injured, but not ten per cent. of the grain was destroyed.

"When wheat is sprouted, a good winnowing machine will remove most of the injured kernels, which make excellent feed for animals. If there be a predominance of sprouted grains in the grist that goes to mill, it is not spoiled for food; it is only spoiled for light bread. The dough, instead of rising by the ordinary process, has a tendency to liquify and spread out and form a sticking mass, that will not be kneaded into loaves. It makes good unleavened bread, and is quite nutritious, with a sweetish taste. By many persons, bread made of sprouted wheat is preferred, but in market the least appearance of grown kernels will injure the sale. Some millers even contend that one per cent. of such kernels will injure the quality of the whole. It is therefore important to the farmer that he should be very careful to keep the sprouted sheaves separate from the sound, and should also separate the sound from the unsound grain in winnowing, as far as possible.

The injury of rain upon wheat is quite over-rated in this country, because we are not well used to it—our harvest weather being usually so fine that the straw retains its golden brightness till it has been threshed. Not so in England. There the rains are often so incessant that sprouted wheat is very common, and the business of shocking or stacking the sheaves is an art that commands higher wages than reaping. There the stacks are always thatched to preserve them from sprouting on the outside, and often built hollow to dry them on the inside. In this country we are much more careless. Our wheat is often exposed to complete soakings. Much of that grown in the West is threshed on the ground, and often lies in a pile through a long rain, and if a warm one, some of the outside grains are sprouted, but the inside of the pile is uninjured.

"The Danubian wheat boats are without roofs; the grain is piled up in a heap rounded on top, and exposed to all the rains that fall during a long voyage. If the weather be warm, the outside grows and mats together some inches deep, and that protects the remainder. The worst of the sprouted part is only fit for beasts, while that but slightly sprouted sells as food for man, and that below the wetted crust is fit for shipment to France or England.

"We have no doubt that the grain is injured by the present wet spell, but it is not 'utterly ruinous.' We may doubt whether farmers do not gain more in other crops than they will lose in wheat by the rains. Meantime let us console ourselves that we are not likely to be destitute of wheat. A trustworthy writer makes an estimate 'that Ohio will yield the present season twenty-two millions of bushels; Illinois, eighteen millions; Wisconsin, ten millions; and Pennsylvania twenty millions.' There is no prospect of a famine."

ONE BY ONE.

One by one the sands are flowing,
One by one the moments fall;
Some are coming, some are going,
Do not strive to grasp them all.

One by one thy duties wait thee,
Let thy whole strength go to each;
Let no future dreams elate thee,
Learn thou first what these can teach.

One by one (bright gifts from Heaven)
Joys are sent thee here below;
Take them readily when given,
Ready too to let them go.

One by one thy griefs shall meet thee,
Do not fear an armed band;
One will fade as others greet thee,
Shadows passing through the land.

Do not look at life's long sorrow;
See how small each moment's pain;
God will help thee for to-morrow,
Every day begin again.

Every hour that fleets so slowly,
Has its task to do or bear;
Luminous the crown, and holy,
If thou set each gem with care.

Do not linger with regretting,
Or for passing hours despond!
Nor, thy daily toil forgetting,
Look too eagerly beyond.

Hours are golden links, God's token,
Reaching Heaven; but one by one
Take them, lest the chain be broken
Ere the pilgrimage be done.

Household Words.

RECIPE FOR FLOATING.—Any human being who will have the presence of mind to clasp the hands behind the back, and *turn the face toward the zenith*, may float in tolerably still water—ay, and *sleep* there, no matter how long. If not knowing how to swim, you would escape drowning when you find yourself in deep water, you have only to consider yourself an empty pitcher—let your mouth and nose, not the *top* of your heavy head be the highest part of you, and you are safe. But thrust up one of your bony hands and down you go; turning up the handle tips

over the pitcher. Having had the happiness to prevent one or two from drowning by this simple instruction, we publish it for the benefit of all who either *love* aquatic sports or *dread* them.

BOSTON VETERINARY INSTITUE.

The Legislature of Massachusetts at its last session granted a charter for the establishment of an institution for the advancement of veterinary knowledge, subject to the statute regulations pertaining to other universities in the Commonwealth. An organization under the charter has been effected by the choice of the following officers:—William S. King, Chairman of the corporation; John P. Jewett, Treasurer; C. L. Flint, Secretary; D. D. Slade, President of the Institute; George H. Dadd, Professor of Anatomy and Physiology; Charles M. Wood, Professor of Theory and Practice; Robert Wood, Professor of Cattle Pathology, with a Board of Examiners and References from various sections of the country.

The first session of the Institute will commence on the first Monday in November, and continue four months. Tickets for a full course, $75, including the privilege of a course at Harvard University Medical College, on Pathological Anatomy and on Chemistry.

LECTURES OF THE FACULTY.—The Professor of Anatomy and Physiology will lecture on the various tissues, organs and structures of the body of the Horse; demonstrating at the same time their mechanical and vital properties, their adaptation, design and functions; their position, dimensions, connection and organization; which will be illustrated by means of the French model, skeletons, diagrams, and by wet and dry preparations; an extensive collection of which has been secured.

The Professor of Theory and Practice will lecture on the general principles of Therapeutics and Pathology, and on the history and treatment of diseases of the horse. He will describe the various remedies used; point out their medicinal properties; and mode of administration.

The Professor of Cattle Pathology will lecture on the various diseases of Neat Stock; the treatment of the same; and the remedies best adapted to their peculiar organizations.

Clinical lectures will occasionally be given by the Faculty on cases that occur in their practice. In fact, every arrangement will be made to secure a thorough and scientific course of instruction.

CONDITIONS OF GRADUATION.—1. The course of instruction shall occupy a period of three years.

2. Each candidate shall furnish evidence that he is twenty-one years old.

3. He shall have attended two full courses of Lectures; one of which, however, may take place in any other incorporated university.

4. He shall satisfy the Faculty that he has had the advantages of a common school education.

5. He shall furnish satisfactory proof that he has been engaged in the study of medicine during a period not less than twelve months, under the direction of a medical practioner, whose certificate will be considered satisfactory proof of the fact.

6. The candidate for examination shall, previous to the time appointed, notify the Dean of his intention, and furnish the documentary evidence of his term of study, tickets to Lectures, &c.

The candidate having complied with the preceding regulations, shall, on the day appointed, be examined by the Faculty and board of examination, on the various branches of Veterinary Science. At the close of such examination, the decision of the Faculty and examiners shall be declared; if favorable, it shall be recorded by the Dean, and the several candidates are then entitled to the degree of V. S., and shall be furnished with a Diploma bearing the seal of the Institute and the signatures of the President, Faculty, and Examiners. Should the decision be unfavorable, the candidate must qualify himself in whatever branch he appears to be deficient, and present himself for re-examination at such time as the Faculty shall direct.—*Granite Farmer.*

For the New England Farmer.

SEEDING DOWN TO GRASS WITH TURNIPS.

MR. EDITOR:—As it is now settled beyond a doubt that we shall get a light crop of hay, I propose to my brother farmers a way to supply the deficiency, in part, that is not generally practiced, and is, withal, cheap, which is an important consideration, in these times. Now for the way: take a piece of moist land that needs seeding to grass, obtain Ruggles, Nourse, Mason & Co.'s Eagle No. 1 plow, (or any other good pattern, same size,) and guage it to run 5½ to 6 inches in depth and turn flat. After plowing what you wish, or have manure to dress, mark off with plow or chain into square rods, and spread twenty-seven ox loads (6 squares to a load goes 162 rods) of compost to the acre, two loads of which should be equal to one of best barn-yard manure, and with harrow or cultivator mix it thoroughly with the up-turned sod. To every acre of land sow one peck of herds-grass, one bushel of red-top and two ounces of flat turnip seed, and mix all thoroughly together before sowing; after which roll or brush the seed in. For the last five years I have plowed with a small plow from 5½ to 6 inches in depth, with two horses or one pair of cattle alone, instead of four cattle, and a great plow running 9 to 10 inches, and a driver, &c. My grass seed comes up quick, holds in longer, and I obtain a greater quantity of hay than I did upon land of same quality, with more manure and more labor, expense and trouble, in preparing the same for seed.

This, I know, is not the theory of most *writing* farmers, was not the theory of my earlier efforts at farming, but is the result of a practical demonstration of its working, so far as my land in concerned.

The land prepared as above, if sown before the 10th of next month, will yield from 75 to 125 bushels of turnips to the acre, sufficient to pay all expense, and as it is no injury to the grass that is to come after, it is surprising that they are not more generally cultivated. H.

Concord, July 28, 1855.

FARMERS' HIGH SCHOOL IN PENNSYLVANIA.—We learn from the *Repository and Whig*, that provision is being made for the organization and management of a Farmers' High School in Pennsylvania, in accordance with an act of incorporation, recently passed by the Legislature of that State. The Trustees are empowered to make choice of a suitable location, embracing not less than two hundred nor more than two thousand acres; and also to choose a principal and other officers and assistants

of suitable practical and scientific attainments, as well as make whatever arrangements the nature of the Institute may require. The State Agricultural Society is authorized to appropriate any sum, not exceeding ten thousand dollars, whenever the school may require it; and also to make annual appropriations, according to the extent of its resources. Already liberal donations of land have been proffered by gentlemen in different parts of the State, and other lands offered at reduced prices.—*American Agriculturist.*

EXTRACTS AND REPLIES.

COCK'S-FOOT THORN.

Enclosed you will find the leaf, flower and a spine of a species of thorn, which I think would make a valuable hedge plant, as it grows spontaneously on a variety of soils, makes a thick growth, and is covered with an abundance of formidable spines. Either this species of thorn is not described in Mrs. Lincoln's Botany, or my limited knowledge of the subject prevents me from identifying it; and you will much oblige several of your readers by giving its botanical name, if you receive the flowers in a condition to ascertain it. And if you are already acquainted with it, will you inform us whether it has ever been tried as a hedge plant.

The fruit is about half an inch in diameter, very much resembling a small red apple, and is borne in such profusion as to give a red color to the whole tree at a distance. In its natural state, the tree grows from ten to fifteen feet high.

Ashfield, 1855. WM. F. BASSETT.

REMARKS.—The plant spoken of is the *Cratægus Crus-galli*, or *Cock's-foot thorn*. Thorny, leaves wedge obovate, subsessile, shining, leathery, corymbs compound; leaflets of the calyx lanceolate sub-serrate. We have never known it used as a hedge plant, but think it would answer the purpose well.

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APPLE SEEDS.

How long do apple seeds retain their vitality? Where can a bushel of them be purchased, and what is the cost per bushel? M. M. J.

Hillsboro' Bridge, N. H.

REMARKS.—We presume there is no limit to the duration of vitality in seeds of all kinds, if they are always preserved in proper condition. It is commonly said that parsnip seed will not come if more than one year old; yet we have sown when three years old, and it came well. It has been satisfactorily proved that wheat taken from the body of an Egyptian mummy, where it had been deposited for *three thousand years*, germinated, and grew as readily as though it had been there but one year. It was in a condition to keep it in a perfect state—neither so dry as to shrivel it too much, nor so moist and warm as to excite it to germination. If this be so, the vitality of seeds depends upon the condition in which they are kept.

A year or two since, we plowed a portion of a pasture which had been fed continuously for twenty-five years, and upon and around which there had been scarcely a mullein to be seen. Yet with the grass that came, there was such a crop of mulleins, scattered over the pasture, as we never saw before. How long had the seed remained there, inert, in the soil? And how long would it, probably, have continued, had the pasture remained unplowed?

Experienced nurserymen, however, tell us that apple seed cannot safely be relied on after the first year, though we do not know that the experiment has ever been fairly tried, of keeping the seed with particular care for the purpose of planting.

Apple seed may be obtained, at the proper season, at most of our seed stores, and are worth about twenty dollars per bushel.

—

A CHEAP FENCE.

I have a 14 acre lot to fence, and would like to know what kind of a fence would be the cheapest and most durable. I should like to have a hedge fence, if they did not cost too much. Please send me word what kind of hedging would be the best, and what it will cost per rod at the nursery. Please answer the above questions through your valuable paper, the reading of which has induced me to buy the above little farm. A BEGINNER.

Amesbury Mills, Mass., 1855.

REMARKS.—In a location as long settled as Amesbury, and where timber is probably scarce and high, we believe a wire fence may be constructed at a less cost than any other, and will last a lifetime. Use No. 6 wire of the best kind. Set a post 6 or 8 inches square, 5 feet into the ground, at each corner, and brace well; then bore the holes for the wires to pass through so close together as to bring the wires near enough to keep out whatever is to come against it.

—

BARREN QUINCE TREES.

I have a number of quince trees, seven or eight years old, and they have blossomed every year for four years, and I have no fruit. They are of good size and growth. Now I wish to know the cause of this; and how they may be made to fruit.

Holliston, July, 1855. C. G. W.

REMARKS.—Cannot tell you—we have some in the same condition. Does any one know? If so, we trust he will reply.

THE DUTY OF BEING CLEAN.

The care of the person is the beginning of good manners. Every one not only consults his own well being, his dignity, and employment, by his care of himself, but he also fulfills a social duty.—Every one should do the best he can for himself, for his own sake, and to avoid giving pain to, or to promote the happiness of others.

We enter here upon delicate ground; but the reader will see its necessity, and excuse our plainness of speech. We must run the risk of exciting a feeling of disgust in some readers, that we may give to others the instruction they need.

The first moral and physical duty of human being *is to be clean*. Cleanliness, the apostle says, is akin to godliness. We would not give much for

the godliness of any man or woman who was not cleanly. Filth is a violation of the rights of several of the senses. We see it; we feel it; sometimes we may be cheated into tasting it; and we smell it terribly. In all ways, and under all conditions, it is vile and bad, ill-mannered and immoral.

First of all, then, and above all, and as the prime condition of all excellence of character and beauty of life, O, be thoroughly and perfectly clean! The human organism is so constituted that no person can be absolutely clean without washing the whole surface of the body every day. Millions of pores are constantly exuding waste matter from the body. This matter, if allowed to remain, is filth; in any considerable quantity it is poison. Retained in the system, it is matter of disease, and is the efficient cause of typhus and similar diseases.

It is not enough to change the under garments often. Much is carried away, but much also adheres. In certain parts of the body, as under the arms and on the feet, it collects rapidly, and in a few hours has an offensive odor.

Cleanly persons have acute senses. I know ladies who can tell whether a person bathes daily the moment he comes into the room. Many an expensively dressed man scents a parlor as soon as he enters it, with the disgusting odor of his unwashed feet and gathered perspiration. We smell it everywhere—at theatres and balls, in steamboat cabins and omnibuses; everywhere we meet this mortifying and disgusting fact of personal uncleanliness.

It is mixed with tobacco, it is mingled with perfumes; but these do not help it. The execrable filth is there, poisoning the atmosphere. The wise Swedenborg tells us that the wicked love the scent of their own hells. People, whose senses are blunted by custom, are unconscious of their personal conditions, but they are always liable to meet those to whom their lack of the first decency of life is a violent breach of good manners.

Ladies, it is a pity that one should be obliged to write and print so impolite a thing, but it is true that you are not always careful enough of the purity of your clothing. You may be nice in your persons—for the honor of all womanhood I hope so—but I have met women of beauty and accomplishment who dressed with great elegance, but when they came near a fire in a cold day, there rose from them odors that were not wafted from "Araby the blest."

The English papers call their "lower orders" the "great unwashed." The circulation of works on water-cure has done much for the cause of cleanliness in this country; but it is to be feared that there are here, as well as in Europe, vast numbers who merit this designation.—*Illustrated Manners Book.*

For the New England Farmer.

MOWING MACHINE.

EDITOR OF N. E. FARMER:—SIR,—Recent experiments, in the use of mowing machines, have demonstrated that one machine, well harnessed and directed, will cut ten acres of grass, containing more than one ton to the acre, in as many successive hours. This shows that the labor of cutting the grass can be performed, for about fifty cents per ton—less than one-half the expense of cutting in the ordinary way by scythes. All that is wanted now is, that they be made in a faithful manner of good material, and they will inevitably come into general use on extended farms. I am not prepared to say, what kind of machine is entitled to preference—though from what I have seen I think there is a decided preference in the *cutting principle* applied to different machines. There is much reason for complaint of the bad material and bad finish of the machines. Respectfully yours,

July 20, 1855. ESSEX.

TOADS.

[BUFO VULGARIS.]

MR. BROWN:—Permit me to give your readers a short chapter on Toads.

From the earliest recollection of the "oldest inhabitants," this little creature has been under the ban, a source of terror to every little Miss, an object of disgust to maids and matrons, a by-word and term of reproach for every old aunt and grandma, in the land, who would never seek farther in their vocabulary of opprobious terms for a suitable name for any little urchin, than to call him a "little nasty *toad*." Boys have made it their sport, have pelted it with stones, pierced it through and through with sharp sticks, substituted it in the place of a ball, upon a bat board, throwing it high into the air, and exulting in its torture; and even men in the field, hoeing their crops, have been wont to rudely thrust it aside with their hoes, as a useless reptile, wondering for what purpose such a loathsome object could have been created. The Toad has been accused of being a venomous reptile, a fit object of dread, a poisoner of choice garden plants, deserving banishment from every one's premises, and fit only to inhabit an *uninhabitable* morass or desert. The toad has, however, occasionally been brought into respectable notice by curiosity hunters, and newspaper paragraph writers, whenever he has chanced to have been found in a torpid state in the cavity of a rock, or in the trunk of a tree, in which cases, an antiquity has been ascribed to it equal to that of Egyptian Mummies, or perhaps set down as of antediluvian origin. In this manner poor toady has gone the rounds of newspaper notoriety, not for any merit of value it might have possessed, but as a matter of mere curiosity. But this poor and despised creature has not been left entirely friendless, nor without an advocate.

Naturalists have placed him in the scale of usefulness where he belongs, and have shown that he is not deserving the very many opprobriums that have been heaped upon him.

To the gardener the toad is a very useful assistant, as it devours a great number of insects and worms that prey upon the plants. In the dark of the evening, the toad comes forth from his hiding place, and commences its work of extermination. Noiselessly it passes through the garden, regaling itself upon the insects that have just begun their nocturnal work upon the tender plants. No one but those who have observed the movements of this little animal, can form any correct estimate of its usefulness. A few evenings since, I watched one a short time, and observed that in the space of fifteen minutes, it devoured some fifteen or twenty insects, of that class too, that in the day time, lie concealed from the observations of the birds, but at night go forth in armies to carry on their work of destruction, to lay waste the gardener's toil. It would be a matter of economy for those who till the ground, to provide the toad with a suitable place for retreat in

the day time, thus virtually saying to him: "my dear little fellow, I value your services, and will do all I can for your comfort."

With a proper appreciation for his services, and care for his preservation, the toad will become quite domesticated, and will continue his valuable work, for years, simply for his "board and lodging." Those who wantonly destroy the toad, should be classed with those who kill harmless and useful birds.

Some years ago a family in Braceville, Trumbull county, observed one day, in the hall of the house, a large toad, leaping along in an orderly and moderate way towards the dining-room door. It entered the room and took a circuit around, then stationed itself between the door and a window, and sat there all day; whenever a fly came near enough he would catch it, and as this was quite often, the work of extermination went on bravely; sometimes he would spring up a foot or more for a fly upon the wall. At sundown he went out to enjoy the refreshing coolness of the evening, and probably the society of his kindred. The next day, to the surprise of the family, he came in and took the same place by the door, and so continued to do during the whole summer. The family whose premises were so unceremoniously occupied, being aware of the useful and harmless nature of their visitor, and being curious to learn its habits, allowed it to remain. Thus the toad carried on the war against the flies, until autumn, when they, having become greatly reduced in numbers, and it being difficult for him any longer to obtain supplies by forage, he concluded to go into "winter quarters." Immediately on the opening of the spring campaign, however, he was at his old post. His message to the flies, as near as can be ascertained, was, "Come, and I'll take you;" they came, were seen, and were swallowed. The enemy being immensely numerous, the war was carried on in the same way, and in the same place, for *six years*, the toad meanwhile having grown strong and increased in stature, and having regularly spent every night in skylarking.

He was *cool* and prompt in action, and moreover a very *slippery* antagonist; whenever anything was said to him by any person passing his stand, his eyes would twinkle in a very pleasant way. The only weapon he ever used was his tongue, which was very long and rough. The human tongue is known to be an exceedingly formidable weapon, but no one has been known to be swallowed outright by its means, though a great many have been *taken in*.

Sometimes a fly would light within a foot of toady, and sit rubbing its miraculous little feet with great delight apparently, when the toad, imitating the notorious Jeffreys, would "give him a lick with the rough side of his tongue," and the poor fly would be condemned and executed instantly.

In one respect, however, the immortal Jeffreys had the advantage of the toad, for he could "smell a puritan a mile off," he said, while the toad had no sense of smell apparently, but was in point of practice *all tongue.—Ohio Farmer.*

THE PRICE OF WHEAT.—*Hunt's Merchants' Magazine* publishes a table of the price of wheat at Albany, on the first day of January for sixty-one years. It is from the minutes kept at the office of the Van Rensselaer Manor, at Albany, where large amounts of rent are payable in wheat, or a cash equivalent, on the first of January each year; and as two parties are deeply interested in the price, it is probably the most reliably correct of any record that can be obtained. The list commences in 1793, when the price was 75 cents a bushel—only five times in the sixty-one years wheat has been $2 or upward, per bushel, while it was seventeen times at $1 or under—twice at seventy-five cents. Only once in thirty-seven years, that is since 1817, to wit in 1837, has it reached $2. The average price for the whole period is $1 38. For the last 30 years it is $1 25.

ECONOMIC CULTIVATION.

We have repeatedly seated ourselves with the intent of writing upon the best mode of cultivating the various crops, and almost as often have we actually had our attention turned to and written upon some other topic. The reason is this: No one, except the favored few who have all the means at command needful in carrying out their plans of farm operations, can do half as well as they know how to do. Their land is poor, and they have not the means of enriching it. Tell a man that a purse full of gold is only an inch beyond his utmost reach, and you do him no good but to excite feelings of discontent and envy, and even lead him to forego certain improvements which are within his reach, because they pay so little compared with what he is really anxious but unable to do. Poverty is a terrible burden, and nowhere is it felt more than among intelligent farmers.

Notwithstanding these difficulties, we would now urge this class of farmers, first, to expend their labor and their fertilizers upon a much smaller quantity of land than is usually done. Instead of planting five acres of corn, plant two, or even one; and plow and cultivate this small field to the entire neglect, if need be, of other acres. If those lie fallow it will be useful to the soil, and at least no money will be wasted upon them.

We say to such farmers, in the second place, you can do more than you have done in the preparation of various composts. There are very few farmers who can not double and treble the quantity and value of these necessary means of restoring vigor to worn-out and barren soils. By diminishing the extent of surface under cultivation, and by proper industry in preparing composts, there is scarcely a farm in the country that can not be made to produce its sixty, and seventy, and eighty bushels of corn to the acre. And even though one acre only is brought up to this desirable condition, a series of years will suffice to bring the whole farm to a high state of cultivation. If only small fields are made thus productive, the hopes and courage of the farmer will be thereby excited, and he will stand up manfully among men, and tell of his success as well as they.

We would NOT advise farmers of *limited means* to buy guano nor phosphates at anything like their present prices. Pay your poorer neighbor his six or eight shillings a day (if you cannot *exchange* work with him) to help you collect leaves from the forest, mud from the meadow, carting the latter only after it is tolerably dry, peat or marl from the bog; and if you can buy barn-yard manures, mix them with turfs, sods, roots, weeds, dirty straw, spoilt hay,

chips that are unfit to burn; and if you are conveniently situated for it, get sea-weeds from the sea-shore, oyster shells, old bones, horns, etc., etc. Dead animals are of great value. The offal from a slaughter-house, worthless scraps of hides, BONES, etc., etc., should be used only with large quantities of common soil, or of some other solvent. Not one in a hundred turns to the best account the contents of privies, hog-pens, soap-suds, and other kinds of waste.

Pardon us for asking why will you tax yourselves so severely by neglecting any of these modes of improving your lands? It may be only such neglect that keeps you in poverty; and though you enter upon the work with many painful doubts in relation to the result, we will assure you against loss from any such operations, if conducted with tolerable discretion.

Now is the time to commence this system of operation for the next year. On every leisure day, let the time be occupied in these preparatory labors. Every hour thus spent is worth something, and will tend to fill your purse at the time of harvest.

Almost all farmers sadly neglect their barn-yard manures. Were these properly cared for, their value, as a whole, would be more than double.

Having thus suggested the means by which manures may be provided, the next inquiry is, how and where shall they be used? Perhaps we are unable to give the information that many would desire, for reasons suggested in the last number. Perhaps you have an enclosure that for many years produced very large crops, and you just looked on and watched your opportunity to take from it the most you could get, returning nothing to it. It may be that it is so situated that it is almost able to take care of itself, like much of the interval on the Connecticut, which is annually enriched by being overflowed. If this is so, we should labor to hasten this process of improvement, and should do all in our power to get this soil back into the condition of a fertile field. When this is accomplished, take the next promising lot, leaving the more desperate cases to the last. When you plow your clayey grounds, fill in, without stint, a sandy compost. If the field is sandy, plow in a clay compost. This need not be a costly job, but generally is practicable for the poorest farmer. If you have a boggy meadow, a thorough ditching will be a part of the process necessary in reclaiming it, while the material thus thrown out is exactly what some other soil most needs. Compensations are not found only in the structures of animals, but they occur in almost every farm the world over.—*The Plough, Loom and Anvil.*

GALLS ON HORSES.

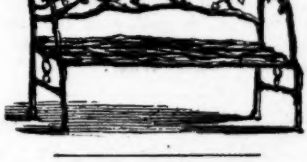
MR. EDITOR:—I have noticed lately in several agricultural papers remedies suggested for galls on horses. Canal horses are more cruelly galled than horses in any other service. Generally they lie idle during the winter season. To a considerable extent, also, the horses of the farmer are but little used during the winter, especially when more than one span is employed on the farm. Ordinarily a single pair is well fed on grain so as to do the chief portion of the winter work, and the rest are kept at a cheaper rate, and do little or no work until spring. The result is, the breast and back of horses thus idle become tender, and when the hard work of spring commences, and the weather is warm and the animal sweats freely, the skin being tender is scalded, and then galled.

Now, prevention is better than cure. A cooling application, that will toughen the skin before use, and prevent inflammatory action when used, is what is needed for the work horse. From long experience, I have found these results to follow the use of spirits saturated with alum. I keep a bottle of alum and whiskey in the stable, and bathe the part pressed by the hames, or breast-collar, and also the back, for several days, before the horses commence their spring work, and also along through the season occasionally, when there is special danger of scalding the breast. I have thus passed entire seasons, employing constantly not less than five horse teams in farming uses, and have not lost the service of a horse a single day, for years together, on account of sore back or breast. This remedy will enable a sore to heal, although the animal continues in constant use.

Now the remedy I have seen most frequently and highly recommended is the application of white lead, in some form or other, to the injured part. I have at an early period tried this remedy—have used it when I knew nothing better—but dislike it much. It answers the purpose, I acknowledge,—makes a hard, tough scab or incrustation on the sore, likely to terminate in a white spot, if the hair ever grows. But I consider this tanning the skin into leather, while on the horse's carcass, to be a *tough* business, to say the least.—*Wool Grower.*

IRON SETTEES FOR PIAZZAS AND GARDENS.

The first engraving represents a fancy pattern Settee for Piazzas; there are a variety of sizes and patterns, some very heavy and rich; the second, represents a Rustic Settee for gardens; there are two sizes, designed for two or three persons. These Settees are for sale by Ruggles, Nourse, Mason & Co., Quincy Hall.



☞ Butter is selling in different parts of Ohio at from 10 to 13 cents; cheese 6 to 8 cents; and eggs 8 to 10 cents.

For the New England Farmer.

WASHINGTON AS AN AGRICULTURIST.

BY FREDERICK HOLBROOK.

We might almost say that the wealth of our language has been exhausted, in the many efforts which have been made delineating those qualities of goodness and greatness which formed the character of Washington; and yet we all feel that his merits and virtues have not been overstated, that he is the peculiar ornament of human nature, and by universal consent, "the father of his country." He has perhaps been most commonly viewed in the light of his military and civil services; but an examination of his habits and sentiments as connected with farming, whether in a public or private character, shows him in quite another light, and in this view we feel that he is entitled to the peculiar regard of the agricultural community.

A friend recently sent me a volume of Washington's letters to Sir John Sinclair, of England,—the perusal of which led me to realize more fully than ever before the great predilections of their illustrious author for the pursuits of agriculture, and his practical acquaintance with its principles; and induced me to examine other publications within reach, which disclose his connection with the subject. The volume of letters to Sinclair contains about fifty pages in quarto or letter-sheet form, the contents being engraved from the original letters, so as to be an exact fac simile of Washington's handwriting. They represent a very round, full and legible hand, read with entire ease at first sight. The letters are models of a good epistolary style of composition, expressing the views of the author with eminent propriety, discrimination and sound sense, and disclosing an intimate knowledge of the subjects discussed. They are particularly honorable to the author, as coming from him while chief magistrate of the United States, at a time when everything connected with the administration of the government was new and untried, and to be wrought out and established without the aid of precedent, making his public labors most arduous and incessant; and when most other public men would have found no time for such a correspondence, or would perhaps have deemed the subjects discussed beneath their notice.

When Washington assumed command of the army, he committed the care of his estates to a relative in whom he reposed special confidence. He gave full and minute directions for the conduct of the farming, taking away with him drawings and charts of each farm and subdivided field, and leaving duplicates with his superintendent, so that in future correspondence particular references might be made to any portions of the estates, and be readily understood by both parties. In the midst of the most stirring and eventful scenes of the war, his mind constantly reverted to his farms at Mount Vernon; and he kept up a frequent and systematic correspondence with his superintendent, giving the most particular directions about the farming, and requiring, in return, full and regular reports of operations, of the condition of the laborers and the stock, the products raised, expenses incurred, and other matters of interest.

At the close of the war, and immediately on resigning his commission in the army, he returned to Mount Vernon, with the determination to pass the remainder of life in rural occupations and enjoyments. He at once engaged most zealously in the improvement of his farming and his breeds of domestic animals; in fitting up the farm-buildings adorning the grounds around the mansion-house with trees and shrubs, and by laying out tasteful walks; arranging anew the vegetable garden; pruning and training the orchards with his own hands; replenishing the orchards, gardens and green-houses with new and rare varieties of trees, vegetables, shrubs, and flowering plants, procured in this and foreign countries. Through his correspondents in Great Britain, he obtained skilful gardeners and farmers to assist him; also through those correspondents came new and desirable field and other seeds, farm implements and tools for conducting his operations—the country being then too young to furnish such helps; also, from the same source, the works of the best British writers on agriculture, which he attentively studied, drawing from them such principles as could be advantageously applied in his farming, and which his eminently sagacious mind knew how to draw out and reduce to practice. It was his habit to rise early, despatch necessary letters before breakfast, and that meal finished, to mount his horse and ride over the farms, giving directions for the operations of the day. He kept a diary for several years, in which was noted the kind and quantity of work done each day on the farms; the times of planting or sowing the fields; of gathering the crops; the expenses of cultivating, and the product of each crop, with the balance for or against each field in a given year; and every other circumstance which would enable him to draw useful conclusions about the details of cultivation and to enlarge his knowledge of farming by experience. He engaged in correspondence upon agricultural topics with men in this country and Great Britain, distinguished by their knowledge of such matters, as well as entertained many such at his house; and his thoughts never flowed more enthusiastically, nor his pen more forcibly and practically, than when writing on these subjects, speaking of his fondness for agricultural pursuits, and of their claims not only upon the intelligent citizen, but upon the statesman and patriot.

In these, to him, delightful occupations, he fondly hoped to pass the remnant of his life. Writing to Lafayette during this period, he remarks:—"I am be-

come a private citizen on the banks of the Potomac; and under the shadow of my own vine and my own fig-tree, free from the bustle of a camp, and the busy scenes of public life, I am solacing myself with those tranquil enjoyments, of which the soldier, who is ever in pursuit of fame, the statesman, whose watchful days and sleepless nights are spent in devising schemes to promote the welfare of his own, perhaps the ruin of other countries, as if this globe were insufficient for us all, and the courtier, who is always watching the countenance of his prince, in hopes of catching a gracious smile, can have very little conception. I have not only retired from all public employments, but I am retiring within myself, and shall be able to view the solitary walk, and tread the paths of private life, with a heartfelt satisfaction. Envious of none, I am determined to be pleased with all; and this, my dear friend, being the order of my march, I will move gently down the stream of life, until I sleep with my fathers."

The Mount Vernon estates consisted of five farms—Mansion House Farm; Union Farm; Dogue Run Farm; Muddy Hole Farm, and River Farm; —containing in all over 3500 acres of arable land, besides large tracts of woodland. Washington employed his talent as a practical surveyor in dividing these farms into regular fields, which were all numbered, and their area of acres ascertained.

Field-books were prepared, in which with his own hands, were placed nicely-drawn plans and charts of the farms and their subdivision into fields. He carefully studied a rotation of crops best adapted to his lands, and varying on the different farms and fields of a farm, to suit their respective peculiarities of soil; and by various practical trials and observation of results, at length established a system of cropping which was adhered to, with but slight variations, through life. Tables were prepared of the rotation of crops to be practiced on each field, and showing what particular crop was to be cultivated on a given field for years ahead; underneath the table of crops, was another stating the probable average time necessary for plowing, harrowing, planting and sowing, the cost of after cultivation, of harvesting; then below an estimate of the probable average product, and the proceeds above the cost of each crop; and a note at the foot of the page, explained briefly wherein that particular rotation of crops was best adapted to the field on which it was practiced. He availed himself of every means at command for increasing the quantity of manures, by raising rich mud from the bed of creeks running through the estates, by digging mud from the swamps and marshy places, by the gathering of leaves and all waste vegetable substances, carrying the materials to the yards and pens to be mingled with the manure. He also experimented with various green crops, plowed under for fertilizing the land, and established the practice of plowing in two crops of buckwheat in one season, turning them down when in blossom, and sowing wheat on the land in the fall.

Washington's agricultural correspondence during the period of retirement after the close of the war is very interesting, and shows the ardor with which he engaged in farming. My limits will not allow me to go much into this view of him, but I cannot forbear showing a little of it.

In a letter to a friend, Sept. 20, 1785, he remarks, "that he has long been convinced that the bed of the Potomac before his door contains an inexhaustible fund of manure; and that if he could adopt an easy, simple and expeditious method of raising and taking it to the land, it might be converted to useful purposes." He then inquires with particularity about a machine recently invented, which his friend knows all about, and which he thinks may be adapted to his purpose for raising the mud into scows, in which it could be floated to the shore.

He frequently corresponds with Arthur Young, of England, who had kindly offered to supply him with men for his farming and gardening, with cattle, implements and tools, seeds and books, or anything else that might contribute to his wants and his rural amusements. Washington often remarks to his correspondent, upon the satisfaction he derives from his pursuits at Mount Vernon, and generally requests seeds, books and implements to be sent to him. In one letter he orders two plows of the most approved construction, and suitable for two horses, and remarks that he has been using the Rotherham patent plow from England, and likes it much; he also orders a great variety of seeds, and inquires for suitable English and Scotch farmers to manage his laborers and stock at Mount Vernon; also desires from Mr. Young a plan of the most complete and useful farm-yard, comprehending barns and every appurtenance with which he is familiar. In a subsequent letter acknowledging receipt of the articles ordered, he remarks "that the plows have been tried and are satisfactory, and that the plan of a farm-yard and buildings sent is an excellent one, and he is already preparing materials to build agreeable to the plan." He further remarks upon the need of improvement in the farming in Virginia, and thinks that the system of husbandry which has been found so beneficial in Great Britain, and which must have been greatly promoted by Mr. Young's "Annals of Agriculture," is gaining ground around him; and states that there are several, among whom he classes himself, who are endeavoring to get into a regular and systematic course of manuring and cropping, and hopes that in a few years more they will "make a more respectable figure as farmers than they have hitherto done."

To Wm. Strickland, of England, he remarks: "The agriculture of this country is indeed low; and

the primary cause of its being so is, that instead of improving a little ground well, we attempt too much and do it ill. A half, a third, or even a fourth of what we mangle, well wrought and properly dressed, would produce more than the whole under our system of management.

In a letter to Sir John Sinclair, the drift of which is to show what improvements may be made in stock in this country by proper care and feeding, he states that after the Peace of Paris in 1783, and his return to farming, he paid particular attention to the improvement of his sheep, (of which he usually kept from seven to eight hundred;) that by this attention, at the shearing of 1789, the fleeces had increased from 2½ lbs. to the average quantity of 5¼ lbs. of wool—a fleece of which, promiscuously taken, he sent to Arthur Young, who put it into the hands of manufacturers for examination, and they pronounced it equal in quality to the Kentish wool. He then goes on to cite instances of greatly increased weight of beef cattle, by means of attention to breeding and to pastures.

When called to assume the office of President of the United States, he frequently alludes in correspondence to the conflict his mind endured in deciding to leave his delightful employments at Mount Vernon, to launch again upon the labors and anxieties of public life. In his Inaugural Speech to Congress, he feelingly says: "I was summoned by my country, whose voice I can never hear but with veneration and love, from a retreat which I had chosen with the fondest predilections, and in my flattering hopes, with an immutable decision, as the asylum of my declining years; a retreat which was rendered every day more necessary as well as more dear to me, by the addition of habit to inclination, and of frequent interruptions in my health to the gradual waste committed on it by time."

On leaving Mount Vernon, to enter upon the duties of chief magistrate of the country, he again consigned his estates to the care of a superintendent, leaving with the latter duplicates of his various plans, charts and tables, and very full written directions for the management of the farming. During the whole period of his absence on these public duties, he required from his manager, regularly once a week, a full report of proceedings and of the condition of everything; also a weekly meteorological table, showing the state of the thermometer each day, the direction of the wind, and state of the weather, by which, among other things, he might form a correct judgment of the labors performed on the farms compared with the opportunities afforded by the season. These reports were regularly answered by the President, his replies often filling two or three sheets of paper, and in the course of the year embracing remarks upon every field and every crop, every branch of labor, the stock of the farm, repairs of fences and buildings, care of tools and carts, preparations of manures, and every minutiæ of farming. I would like to give a sketch of one or more of these masterly productions, but want of space forbids. Suffice it to say, that they possess to my mind very great interest, coming from such a source, and when the writer was surrounded by such circumstances, and engaged in such public labors. The like of them, considering all these things, cannot be found elsewhere.

As previously remarked, it was during the eight years Washington held the office of President, that his correspondence with Sir John Sinclair was conducted. The correspondence commenced soon after the establishment of the British Board of Agriculture, in which enterprise Sinclair was a principal actor. The correspondence dwelt largely on the operations of the British Board, on the mportant results flowing and to flow therefrom to Great Britain and all other countries. Washington's mind at once caught the enthusiasm of Sinclair and his associates, in Board, and he corresponded with some of the leading agriculturists in this country, urging them to furnish reports to the Board on several important subjects. His mind was so much interested in the promotion of agriculture by public patronage, believing that it would add greatly to the wealth and happiness of any nation, that he recommended the subject to the consideration of Congress. Many of us are familiar with his memorable words on that subject, admire his foresight and patriotism in framing them; but wonder at the apathy with which they have ever bee regarded by our legislators, from the time they were uttered to the present moment. Many of us believe that an establishment by Congress such as he contemplated, with but a very moderate appropriation, as compared with many that have been given to much less worthy objects, would have proved of great and lasting value to the country. However, what the general government has neglected to do, in this regard, several of the States separately are doing, and the benefits flowing therefrom are quite apparent, proving beyond doubt the correctness of Washington's views.

In one of these letters to Sinclair, Washington remarks:—"I could not omit so favorable an opportunity, as the departure of Mr. Stickland affords me, of presenting my best respects to you; and my sincere thanks for the views of agriculture in the different countries of Great Britain, which you have had the goodness to send me,—and for the Diploma (received by the hands of Mr. Day) admitting me a foreign honorary member of the Board of Agriculture. For this testimony of the attention of that body, and for the honor it has conferred on me, I have a high sense. From the first intimation you were pleased to give me of this Institution, I conceived the most favorable ideas of its

utility:—and the more I have seen and reflected on the plan since, the more convinced I am of its importance, in a rational point of view, not only to Great Britain, but to all other countries."

Under date of July 20th, 1794, he writes to Sinclair as follows:—"I know of no pursuit in which more real and important service can be rendered to any country, than by improving its agriculture—its breeds of useful animals—and other branches of a husbandman's cares;—nor can I conceive any plan more conducive to this end than the one you have introduced for bringing into view the actual state of them in all parts of the Kingdom; by which good and bad habits are exhibited in a manner too plain to be misconceived, for the accounts given to the British Board appear, in general, to be drawn up in a masterly manner, affording a fund of information useful in political economy—serviceable in all countries."

Again, under date Dec. 10, 1796, he says:—"A few months more, say the 3d of March next, (1797,) and the scenes of my political life will close, and leave me in the shades of retirement; when, if a few years are allowed me to enjoy it (many I cannot expect, being upon the verge of sixty-five,) and health is continued to me, I shall pursue with pleasure and edification the fruits of the exertions of the British Board for the improvement of agriculture; and shall have leisure, I trust, to realize some of the useful discoveries which have been made in the science of husbandry. Until the above period shall have arrived, and particularly during the present session of Congress, which commenced the 5th instant, I can give but little attention to matters out of the line of my immediate avocations. I did not, however, omit the occasion, at the opening of the session, to call the attention of that body to the importance of agriculture."

The following extract from his Speech to Congress, Dec. 5, 1796, contains his remarks alluded to above:—

"It will not be doubted that with reference either to individual or national welfare. Agriculture is of primary importance. In proportion as nations advance in population and other circumstances of maturity, this truth becomes more apparent, and renders the cultivation of the soil more and more an object of public patronage. Institutions for promoting it grow up, supported by the public purse; and to what object can it be dedicated with greater propriety? Among the means which have been employed to this end, none have been attended with greater success than the establishment of Boards, composed of proper characters, charged with collecting and diffusing information, and enabled by premiums, and small pecuniary aid, to encourage and assist a spirit of discovery and improvement. This species of establishment contributes doubly to the increase of improvement, by stimulating to enterprise and experiment, and by drawing to a common centre the results everywhere of individual skill and observation, and spreading them thence over the whole nation. Experience accordingly has shown that they are very cheap instruments of immense national benefits."

Washington often remarks to Sinclair that agriculture has ever been his favorite pursuit, regrets that the duties of his public station do not allow him to pay that attention to it that he could wish, and expresses an earnest longing for the time to arrive when he may return to Mount Vernon, and engage in "these most agreeable and useful occupations." On retiring from his public office, in the spring of 1797, he returned to his estates on the Potomac, and engaged with renewed pleasure in farming. Writing to Mr. Stickland soon after his retirement to private life, he says:—"At no period have I been more closely employed than now, in repairing the ravages of an eight years' absence. Engaging workmen of different sorts, providing and looking after them, together with the necessary attention to my farms, have occupied all my time since I have been at home. For the detailed accounts of your observations on the husbandry of these United States, and your reflections thereon, I feel myself much obliged, and shall at all times be thankful for any suggestions on agricultural subjects which you may find leisure and inclination to favor me with, as the remainder of my life, which in the common course of things, now in my sixty-sixth year, cannot be of long continuance, will be devoted wholly to rural and agricultural pursuits."

And so for the brief period allotted him after this final retirement, was that life spent. Only four days previous to his death, he made out a new and elaborate plan for the management of his farms, revising and improving upon such former modes of cultivation as appeared to him to need it, making new tables of rotation and of estimates of labor, products, &c. A sketch of these interesting documents cannot be given in this necessarily limited article.

I close with the brief expression of a wish that our statesmen might copy largely from the example of Washington, catching something of his earnest solicitude for the advancement of the agricultural interests of the country, and not allowing mere political theories, or considerations of party, to hinder them from efforts to promote those interests.

F. H.

Brattleboro', July 10, 1855.

EARLY TOMATOES.—Mr. GEORGE W. WHITE, of North Cambridge, left with us, July 21st, a box of tomatoes, well grown and fully ripe, which he raised in the open air. He informs us that last

year, when the season was more forward, he sold a quantity as early as July 12th. The variety he cultivates came from the French seed, imported two or three years since, and they are prolific as well as early bearers.

For the New England Farmer.

DESIGN AND USEFULNESS OF LABOR.

BY JOHN GOLDSBURY.

From the earliest authentic history of our race, we learn that man was doomed to till the ground, and to gain his subsistence by the sweat of his brow. This judicial sentence was pronounced upon him in consequence of his disobedience in partaking of the forbidden fruit. Man was placed in "the garden of Eden to dress it and to keep it;" "but of the tree of the knowledge of good and evil" he was forbidden to eat. But man disobeyed his Maker; he partook of the forbidden fruit, and the very ground was cursed for his sake. "Therefore, the Lord God sent him forth from the garden of Eden, to till the ground, from whence he was taken. So he drove out the man."

Whether the whole race of man could or would have lived on the earth, through all ages, and, at the same time, have complied with the command to "be fruitful and multiply, and replenish the earth and subdue it," without any labor in cultivating and subduing the ground, and rendering it fruitful, is a question which admits of some discussion, and on which we do not propose to enter. But it would be well for us to inquire a little into the design and usefulness of man's doom in being obliged to cultivate the earth in order to gain a subsistence. And here, if we only stop to consider the nature, design and reasonableness of his employment, or the natural effects of his labors on his character, his usefulness and his happiness, we shall be led to conclude that, however wicked man may have been in disobeying his Maker, God has dealt with him in great mercy, benevolence and kindness, and made the very labors to which he was doomed the stepping-stones to his virtue and happiness.

No one will deny that labor is an honest and honorable employment. It is honest, because it is right, and because God has required it. For the same reason, it is honorable. It has nothing in its nature that is dishonest or dishonorable—nothing that is mean, degrading, disgraceful or derogatory; but, on the contrary, it has much that is ennobling, elevating and praiseworthy. Nor was it the design of God, in imposing labor upon man, to degrade him, or to require him to perform a service which is beneath the dignity of his character. It was not to degrade man, but to lift him up and make him a man, that he was sent forth to labor. The labor imposed upon him was a reasonable service—such as God had a right to impose, and as man was bound in duty to perform. All that was required of man was to labor for his own good as well as that of others—to gain his living by his labor. It was, therefore, not only an honest and honorable employment, but a useful one—such as conduces to health, prosperity and happiness.

The laboring man, whether he be a farmer, a mechanic, a manufacturer, a tradesman, or a professional man, is the truly happy man. It is the very nature of labor to impart happiness to all its votaries. There is a real satisfaction of mind in beholding the labors and productions of one's own hands—in overcoming difficulties, and in arriving at certain desirable results. But, on the contrary, idleness leads to poverty and wretchedness, and renders a man truly miserable. Hear the language of Solomon upon this point, who has given us a glowing description of the idle man: "I went by the field of the slothful, and by the vineyard of the man void of understanding; and lo, it was all grown over with thorns, and nettles had covered the face thereof, and the stone-wall thereof was broken down. Then I saw, and considered it well; I looked upon it, and received instruction. Yet a little sleep, a little slumber, a little folding of the hands to sleep: so shall thy poverty come as one that travelleth, and thy want as an armed man."

The industrious farmer, perhaps, takes more satisfaction than any other man. His employment gives symmetry and strength to his frame, energy to his character, buoyancy to his spirits, and expansion to all his faculties. He is Nature's true nobleman. This he manifests by his industry and perseverance, no less, than by his noble character, his pure thoughts, his sound reasoning, and his practical good sense. For, though he has been turned out of the beautiful garden of Eden and of innocence, yet he has not been dwarfed, either in his mental or his physical powers. He is still a man, possessing all the faculties and powers of a man: nor yet has he been doomed to cultivate a barren waste or a sandy desert, but a soil naturally rich, fruitful and productive, where, by his labor and diligence, he may make "the wilderness and solitary place flourish and blossom as the rose." And he *has* made "the wilderness and solitary place" productive of all the comforts, the conveniences, the necessaries and the luxuries of life.

When we look around us, even in our own land, and mark the progress of agriculture and the mechanic arts, of science, literature and general intelligence,—when we see the cities and thriving towns with which New England is filled, and reflect how rapidly the forest has given way to cultivated fields, and cultivated fields to busy and prosperous towns, we can hardly realize, that, in less than a hundred and fifty years, all this change has been effected,—that a howling wilderness has been converted into a fruitful field, occupied and cultivated by many millions of virtuous, intelligent, enterprising and happy inhabitants.

Labor, then, is a necessary, a useful, and a virtuous employment. God himself has shown it to be such, not only by requiring it of man, but by his own labors in creating the world. According to the Bible, God labored six days, in the work of creation, which he would not have done, had labor been dishonorable or useless. From the very representations of the Bible, therefore,—from the example of God in creating the world and all things therein, from all that we know of the character of God, and of his design in requiring labor of man, we infer the wise design and the great usefulness of labor.

Warwick, 1855.

REMARKS.—In a former article by this writer, the name was printed Goldsmith, when it should have been Goldsbury.

☞ The mother of Horace Greely died at Wayne, Erie county, Penn., on the 27th of July. The father of Mr. Greely is still living.

For the New England Farmer.

ANTIQUITY AND DIGNITY OF AGRICULTURE.

BY JOHN GOLDSBURY.

Agriculture was one of the earliest and most common pursuits of man: tilling the ground and tending herds and flocks were among the first and most general occupations; and the knowledge, relating to these subjects, was the first acquired and the most extensive. Almost all the ancient heathen nations ascribe the invention and introduction of agriculture in their country to some divinity or deified sovereign. With some nations, the cultivation of the soil was the most common occupation; with others, the raising of cattle; and with others, hunting and fishing. Compared with other modes of subsistence, agriculture has an important advantage in promoting various arts, because it compels men to renounce a wandering life, and settle in fixed, permanent abodes; thus it increases the demand for conveniences, and furnishes an occasion for inventions, which may help to facilitate and carry to perfection the culture of the soil.

Agriculture was, from the beginning, an honorable employment among the Romans. Patricians and the most distinguished citizens engaged in it. Cincinnatus was laboring in his fields, when informed of his election to the dictatorship. Regulus asked leave to retire from the senate to cultivate a little farm, suffering from neglect. This attention to the actual cultivation of the lands, by the ablest and best informed men, occasioned an advancement in the art of agriculture, such as the Greeks never attained. There were, however, numerous works written in Greek on this subject. Varro mentions about fifty authors. But whatever might have been written by the Greeks, the Romans were not, in this branch, mere imitators or borrowers. The maxims and precepts, which are given by the Roman writers, were drawn from the experiments and observations of the Romans themselves. Their principles are not extensively applicable to modern agriculture; yet their writings abound in useful hints and remarks, and have always been regarded as curious and interesting compositions. Virgil's Georgics may properly be adverted to as illustrating the agriculture of the Romans.

Agriculture was also held in high estimation among the Greeks. It was their most common pursuit and means of living. The boundaries of their fields were marked by stones, which served to guard the cultivators against mutual encroachments. The culture of the vine and of trees was also an object of attention. The raising of cattle was a common employment, and a principal source of wealth. These employments were not considered in any way degrading or ignoble, but were exercised by persons of eminence and even by princes. From the writings of Hesiod, it is evident that agriculture was, at an early period, a subject of practical interest among the Greeks; yet the art does not appear to have been carried to very great perfection in any of the States. The soil of Attica was more favorable to the production of the grape, olive, and fig, than of grain. The exportation of corn was prohibited. If corn-dealers combined to raise the price, they were liable to capital punishment. In order to avoid a scarcity of corn, public granaries were kept, under the direction of purveyors and receivers.

Agriculture, both in Greece and Rome, was held in much higher estimation than commerce, or any of the mechanic arts. The fields were chiefly possessed by respectable citizens. Many noblemen lived upon their own lands, and made the cultivation and improvement of them a special study; the ornamenting of their estates constituted an important part of their luxury. The grain chiefly cultivated was wheat, but of various kinds; such as corn, barley, oats, &c. The breeding of cattle was an object of attention; chiefly, oxen, horses, sheep and goats. Much care was also bestowed on bees. Trees, also, both forest, fruit and ornamental, received their share of attention. Both nations were acquainted with most of the various methods now practiced for propagating the different species and varieties of fruit; but the culture of the vine finally took the precedence of all other cultivation.

These nations, Greece and Rome, had various gods and goddesses whom they regarded and worshipped as the patrons of agriculture, the protectors of fields, of fruits, and of flowers, and the defenders of limits. Among these were ***Terminus***, the god of boundaries, whose peculiar province it was to mark the limits of landed property, and to guard and protect them; ***Priapus***, the god of fields, of cultivated grounds and gardens; ***Vertumnus***, the god of fruit trees, and his wife, ***Pomona***, the goddess of fruits and gardens; ***Flora*** and ***Chloris***, the goddesses of blossoms and flowers; ***Feronia***, the goddess of fruits, nurseries and groves; ***Pales***, the goddess of pasturage and the feeding of flocks; ***Bubona***, the goddess of oxen; ***Segetia***, the goddess of seed planted in the earth; ***Hippona***, the goddess of horses; ***Collina***, the goddess of the hills; ***Vallonia***, the goddess of the valleys; ***Runcina***, the goddess of weeding; ***Volusia***, the goddess of the growing corn; ***Mellona***, the goddess of honey; ***Occator***, the god of harrowing; ***Stercutius***, the god of manuring; and ***Pilumnus***, the god of kneading and baking bread. Besides these, they had a great goddess by the name of ***Ceres***, to whom they ascribed the discovery of agriculture, and all subsequent improvements in husbandry. She is said to have first taught men to cultivate grain, and to instruct them in all the labors pertaining to it. She travelled from country to country, and imparted her favors to all lands by giving instruction in agriculture and the use of the plow. And she associated ***Triptolemus*** with her, as a companion of her travels, and sent him over the earth, to teach husbandry, and thereby raised him to the rank of a god. To the foregoing gods and goddesses, the Greeks and Romans offered in sacrifice at stated times, not only fruits and flowers, but some of the richest productions of the earth.

TALL HERD'S GRASS.—We saw the other day, in the office of S. B. PHINNEY, Esq., Editor of the *Barnstable Patriot*, some herd's grass upwards of 6 feet high, a fair specimen of several acres grown upon a swamp which he had reclaimed. Friend Phinney, throw your editorial quill into the fire, and your commission as Collector of the port of Barnstable, to the sharks of Barnstable Bay, and let your genius work in its natural way. Herd's grass six feet and one inch high by the acre, to say nothing of the *ten* acres of yellow pines now ten to fifteen feet high, the seeds of which he sowed some ten years

ago! What a pity that he who can change the face of nature at will, and make the earth teem with its richest productions, should cramp his genius over a "political item," or over a dozen "light-houses." Why, anybody can write an editorial, or see that Uncle Sam's revenue is duly collected; but who can turn an ugly swamp inside out, and clothe it with perennial beauty and herd's grass six feet and one inch high! He must have taken his pattern from some of those ugly customers, called sword-fish, who perforate ships' bottoms with their noses six feet and one inch long!

For the New England Farmer.

STONE HOUSES.

Seeing an inquiry of a "Subscriber" from Warwick in relation to gravel houses, I have ventured to indite the following, respecting a method of building with common stone and mortar used here in one instance, and which has also been successfully used elsewhere. To many the method may not be new; but still it is to some, and deserves notice as being an attempt to solve the great problem so often proposed by men of moderate and humble means, "how can we build substantially and cheaply." Our forests are fast disappearing; and thorough, substantial, well-built wood houses, will now rank among those of the first cost. True, we can even now build quite cheap with wood, provided we are content to accept a building which is really *cheap* in all particulars. But with such structures no man of sterling mind is at all satisfied. The house built in an unsubstantial manner does the possessor little or no good in adding to his real happiness here; nay, it may do him positive moral harm, if not physical; for it may lower his estimate of the good, the noble, and the true; although it may shield him and his in a measure from the elements.

Last year, (1854) a stone machine shop, 400 feet long, 40 feet wide and two stories high, with walls 21 inches thick, was built here of a kind of slate in the following manner. The entire mass of stone blasted from the ledge was carried to the building, the nature of the ledge being such that a very large portion of the stone obtained by blasting was in small pieces; into the mortar, which was made of lime and coarse sand, were put, and intimately mixed with it, all the small chips and fragments. All the larger stone were reserved for the process of filling in. The walls were made by filling the mortar into boxes, made by placing plank outside and inside of the wall, a distance apart of the desired thickness of the wall. These plank are kept in their places by plumb, straight edges of sufficient strength placed and fastened upon the outside of the plank. When the planks have been thus properly disposed in their places to a height of three or four feet above the foundation, the mortar, in a very plastic state, is brought from the mortar-bed in hods, and poured into the space between the planks. Into this soft, yielding mass were disposed all of the larger stones in such a manner as to make the wall one solid mass of mortar and stone. These processes of alternately filling with mortar and larger stone are repeated until the mould is full.

The mould or planks forming the wall are allowed to remain upon the walls until the mortar has set, say twenty-four hours or more, according to the quality of the mortar; and are then removed and reset, and all the foregoing operations repeated until the walls of the building are completed. The windows and door-frames are made and set in the same manner as they are for brick buildings; over the doors and windows is put a wood or stone lintel to hold the pressure of the wall until it is dry. Care is to be taken in placing all of the stone around the windows and doors to have them permanently fixed in their places, so as to form a solid jam. The flooring timbers are placed and anchored into the walls in the same manner as they are in brick buildings. As this kind of wall is somewhat uneven for the reception of the flooring timbers, a piece of scantling, say 24 by 6 inches, should be placed and levelled upon the walls, and be firmly bedded with mortar to receive the joists and other flooring timbers.

This method accords with that practiced by Dr. C. F. Ramsdell, formerly of Springfield, but now of South Brookfield, in constructing buildings of stone. The Doctor has had some experience in this mode of building, and would be very glad to communicate with any one upon this subject. The sand for his mortar he prefers to be coarse and filled with small gravel stone, the largest of which should not exceed the size of a kidney bean. Into his mortar in a very thin state, when well mixed, he puts larger stone of various sizes. The laying of his walls he does in the same manner as before stated. For his larger stone he takes any field or whatever kind of good building stones are most easy to be obtained, which are of a suitable size for his walls. Flat stone are always to be preferred, but by a due admixture of round and flat stone a very strong wall may thus be built. For success with this kind of wall one precaution is of the first importance, and that is in laying, the materials should be so disposed in the walls, as to make the same entirely solid, and at the same time have every individual stone entirely coated with the mortar.

The thickness of the walls should be proportioned to the size of the building and the height and number of stories. For ordinary dwellings, two stories high, the Doctor thinks 14 inches for the cellar, 12 inches for the first story, and 10 inches for the second story, to be about that which is required for strength and durability. All inside chimneys would be best built with brick. Those in the outside walls might be carried with the same materials of the walls.

The outside of these houses may be finished with a kind of mortar-finish called stucco. This finish has been quite successfully used for many years in various parts of our country. It is made of common lime and hydraulic cement, together with some chemicals used in coloring the surface after it is partly dry; this makes a fine and durable covering and finish: and withal, is tasty in appearance, it being blocked off in imitation of large stones, and may be so shaded as to represent any of the sandstones or granite, to suit the fancy of the proprietor. If a nicer and more expensive finish is desired than the stucco, this wall is well adapted to receive the mastic finish, which is made of dry sand and linseed oil, together with some other drying materials. The doors and windows may be ornamented with terra cotta or iron projecting caps if desired; and all the appendages of verandahs and projecting

cornices, and ornamental observatories, may appropriately have a place upon these structures.

To prevent any injurious effects arising from dampness on account of the absorption and retention of moisture by the walls, against all the outside wall, upon the inside there should be furring, done as is done in many brick buildings, and for the same reason. Where oil mastic is used, the inside plastering might be rendered directly upon the walls, as the mastic, from its very nature, would prevent the absorption of moisture. And some express a positive opinion that where the stucco is used, no injurious effects would arise from dampness, even if the inside plastering were done upon the walls.

Upon the authority of Dr. Ramsdell, the cost of these structures finished upon the outside with stucco in a plain manner, is not far from the cost of common wood dwellings, or from $1,25 to $1,50 per square yard of the wall all finished. This price, however, must vary some with the price of the lime in particular vicinities, and with the facility with which the sand and other materials could be obtained.

P. BALL.

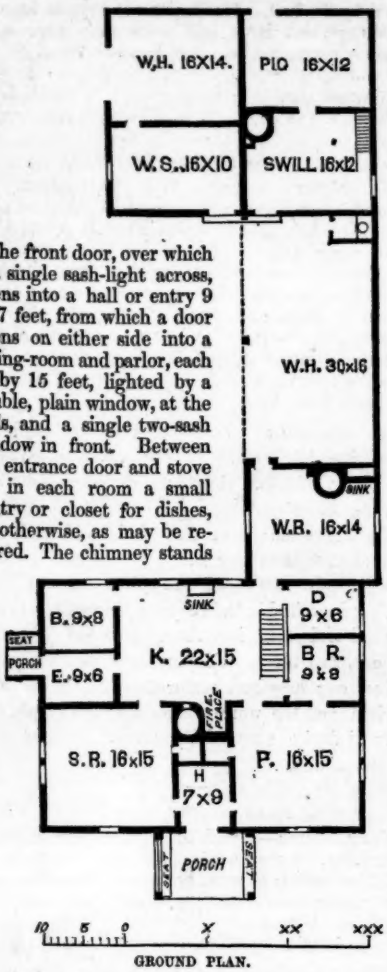
Worcester, 1855.

DESIGN FOR A SMALL FARM HOUSE.

We here present a farm house of the simplest and most unpretending kind, suitable for a farm of twenty, fifty, or an hundred acres. Buildings somewhat in this style are not unfrequently seen in the New England States, and in New York; and the plan is in fact suggested, although not copied, from some farm houses which we have known there, with improvements and additions of our own.

This house may be built either of stone, brick or wood. The style is rather rustic than otherwise, and intended to be altogether plain, yet agreeable in outward appearance, and of quite convenient arrangement. The body of this house is 40 by 30 feet on the ground, and 12 feet high, to the plates for the roof; the lower rooms nine feet high; the roof intended for a pitch of 35°—but, by an error in the drawing, made less—thus affording very tolerable chamber room in the roof story. The L, or rear projection, containing the wash-room and woodhouse, juts out two feet from the side of the house to which it is attached, with posts 7½ feet high above the floor of the main house; the pitch of the roof being the same. Beyond this is a building 32 by 24 feet, with 10 feet posts, partitioned off into a swill-room, piggery, workshop, and wagon-house, and a like roof with the others. A light, rustic porch, 12 by 18 feet, with lattice work, is placed on the front of the house, and another at the side door, over which vines, by way of drapery, may run; thus combining that sheltered, comfortable and homelike expression so desirable in a rural dwelling.—The chimney is carried out in three separate flues, sufficiently marked by the partitions above the roof. The windows are hooded, or sheltered, to protect them from the weather, and fitted with simple sliding sashes, with 7 by 9 or 8 by 10 glass. Outer blinds may be added, if required; but it is usually better to have these *inside*, as they are no ornament to the outside of the building, are liable to be driven back and forth by the wind, even if fastenings are used, and in any event are little better than a continual annoyance.

INTERIOR ARRANGEMENT.



GROUND PLAN.

The front door, over which is a single sash-light across, opens into a hall or entry 9 by 7 feet, from which a door opens on either side into a sitting-room and parlor, each 16 by 15 feet, lighted by a double, plain window, at the ends, and a single two-sash window in front. Between the entrance door and stove are in each room a small pantry or closet for dishes, or otherwise, as may be required. The chimney stands in the centre of the house, with a separate flue for each front room, into which a thimble is inserted to receive the stovepipes by which they are warmed; and from the inner side of these rooms each has a door passing to the kitchen, or chief living room. This last apartment is 22 by 15 feet, with a broad fireplace containing a crane, hooks and trammel, if required, and a spacious family oven—affording those homely and primitive comforts still so dear to many of us who are not ready to concede that all the virtues of the present day are combined in a "perfection cooking stove," and a "patent" heater; although there is a chance for these last, if they should be adopted into the peaceful atmosphere of this kitchen.

On one side of the kitchen, in rear of the stairs, is a bedroom, 9 by 8 feet, with a window in one corner. Adjoining that, is a buttery, dairy-room, or closet, 9 by 6 feet, also having a window. At the inner end of the stairway is the cellar passage; at the outer end is the chamber passage, landing above in the highest part of the roof story. Opposite the chamber stairs is a door leading to the wash-room. Between the two windows, on the rear side of the kitchen, is a sink, with a waste pipe passing out through the wall. At the further corner a door opens into a snug bedroom 9 by 8 feet, lighted by a window in rear; and adjoining this is a side entry leading from the end door, 9 by 6 feet in area; thus making every room in the house accessible at once from the kitchen, and giving the greatest possible convenience in both living and house-work.

The roof story is partitioned into convenient-sized bedrooms; the ceiling running down the pitch of the roof to within two feet of the floor, unless they are cut short by inner partitions, as they are in the largest chamber, to give closets. The open area in the centre, at the head of the stairs, is lighted by a small gable window inserted in the roof, at the rear, and serves as a lumber room; or, if necessary, a bed may occupy a part of it.

In rear of the main dwelling is a building 44 by 16 feet, occupied as a wash-room and wood-house. The wash-room floor is let down eight inches below the kitchen, and is 16 by 14 feet, in area, lighted by a window on each side, with a chimney, in which is set a boiler, and fireplace, if desired, and a sink in the corner adjoining. This room is 7½ feet in height. A door passes from this wash-room into the wood-house, which is 30 by 16 feet, open in front, with a water-closet in the further corner.

The cellar is 7½ feet in height—and is the whole size of the house, laid with good stone wall, in lime mortar, with a flight of steps leading outside, in rear of the kitchen, and two or more sash-light windows at the ends. If not in a loose, gravelly, or sandy soil, the cellar should be kept dry by a drain leading out on to lower ground.

The building beyond, and adjoining the wood-house, contains a swill house 16 by 12 feet, with a window in one end; a chimney and boiler in one corner, with storage for swill barrels, grain, meal, potatoes, &c., for feeding the pigs, which are in the adjoining pen of same size, with feeding trough, place for sleeping, &c., and having a window in one end and a door in the rear, leading to a yard.

Adjoining these, in front, is a workshop and tool-house, 16 by 10 feet, with a window at the end, and an entrance door near the wood house. In this is a joiner's work-bench, a chest of working tools, such as saw, hammers, augers, &c., &c., necessary for repairing implements, doing little rough jobs, or other wood work, &c., which every farmer ought to do for himself; and also storing his hoes, axes, shovels, hammers, and other small farm implements. In this room he will find abundant rainy-day employment in repairing his utensils of various kinds, making his beehives, hencoops, &c., &c. Next to this is the wagon-house, 16 by 14 feet, with broad doors at the end, and harness pegs around the walls.

The posts of this building are 10 feet high; the rooms eight feet high, and a low chamber overhead for storing lumber, grain, and other articles, as may be required. Altogether, these several apartments make a very complete and desirable accommodation to a man with the property and occupation for which it is intended.

On one side and adjoining the house, should be the garden, the clothes-yard, and the bee-house, which last should always stand in full sight, and facing the most frequented room—say the kitchen—that they can be seen daily during the swarming season, as those performing household duties may keep them in view.—*Allen's Rural Architecture.*

EXTRACTS AND REPLIES.

APHIDES, OR PLANT LICE.

MR. FARMER:—Your correspondent "J. D." of Exeter, N. H., inquires how he can destroy *Aphides* or plant lice. Some dozen years since they were here very destructive to young trees, but they have since nearly disappeared. Whale oil soap is what few farmers have—and common soap or soap-suds, when applied so strong as to kill the trees, will not injure them.

The only effectual remedy I have ever applied is *strong* tobacco water; this will kill the insects without injuring the trees. It is easily applied by dipping the limbs in the water, or by sponging them; any piece of old quilt or cotton batting will answer for a sponge.

The wife of Professor Thompson, an enthusiastic horticulturist, and one who has raised more young trees than any other lady in this town, told me she had been perfectly successful in ridding her trees of the whole tribe of *aphides* by using water in which potatoes had been boiled; this she preferred to tobacco water, as it discolored nothing in its application. C. GOODRICH.

Burlington, Vt., July 20, 1855.

TALL RYE—AND THE CROPS.

MR. EDITOR:—Your paper of June 16th speaks of some *tall rye* raised in Farmington, Iowa, which measured six feet in length; one of my neighbors has a lot of rye growing, which stands *six feet and a quarter* high; Mr. James Hall has a number of acres of noble-looking rye, some of which measures six feet and a half in length.

Crops generally look very well, though the weather has been rather wet for some pieces of corn. A SUBSCRIBER.

Newport, N. H., July 11, 1855.

SKUNK CABBAGE.

MR. EDITOR:—I wish to know if there is any way to eradicate skunk cabbage. I have a maple-swamp, which contains a great deal of this plant, and I am desirous of removing it entirely. Any information which you can give will be acceptable to A SUBSCRIBER.

REMARKS.—Where you cannot plow, pull it up when it is just gone out of blossom. Persist in this course for two or three years, and you will greatly check, if not eradicate it. A piece of the root an inch in length will grow at first, but cannot retain much vitality for any length of time if deprived of the friendly offices of the leaves. Or, dig it up with a spade in May, and then as often as the leaves get to be 8 or 10 inches long.

CROPS—REAPERS—HAIL-STORM.

The prospect for an abundant harvest is very good in every section of Canada West.

Several reaping machines have been purchased for use in this vicinity, and will soon be in operation. Grass is the lightest crop.

A very destructive hail storm passed through this county on the 13th inst., doing much damage to crops in some places. It went in a vein about half a mile wide. More than one hundred panes of glass were broken in one house, and a great many acres of grain were entirely destroyed. It is reported that in one neighborhood many birds were killed by the hail. The hailstones were as large as hens' eggs, and it is said some were seen *seven inches* in circumference; but I cannot vouch for the truth of it.

Weather very hot; mercury 87° in the shade.

July 11, 1855. L. VARNEY.

HORSE POWER—APPLES.

MR. NOURSE:—Sir,—Will you inform me through your paper, what would be the cost of a small threshing machine that could be worked by horse-power. (*a.*)

I have a small mill for grinding corn which is worked by horses; could I get a machine to be worked by the same power that carries the mill? (*b.*)

Also, will you please to inform me what will prevent the stinging of apples, causing them to drop off while very small. (*c.*) DANIEL CHILDS.

Cotuit Port, 1855.

REMARKS.—(*a.*) Thresher, separator and fixtures complete, with a 24 inch cylinder, $37,00; size larger, $40,00. Set of India rubber belts, and other extras, $5,00.

(*b.*) The same power that carries your mill may be applied to the thresher.

(*c.*) Apples fall from two causes—mostly from the egg deposited in the blossom, where the worm is hatched and passes into the apple itself. Another cause is, that the apple is perforated by the curculio, and an egg deposited under the skin where it is hatched and the worm passes into the apple. If you will devise a remedy, you may consider your fortune as made.

BILES ON THE HORSE.

MR. EDITOR:—I wish to inquire what will cure collar biles. I have a mare afflicted with them so that I am unable to work her at all. They are small biles, which come out in great numbers under the collar and on the back. C. C.

Springfield, July, 1855.

REMARKS.—Your mare has at some time, probably, been heated and then fed highly with grain, and the blood has contracted humors which show themselves whenever the skin is chafed or becomes hot. Careful feeding, with careful usage, will be the best remedy. Let her have a run of five or six weeks in a good pasture where the grass is sweet, if you can possibly spare her.

HOW TO KILL PLANT LICE.

Make a wash of soft soap, cow manure, and water, and wash the trunks and large limbs with it. Then for two or three mornings when the dew is on, sprinkle with ashes. This, with me, has effectually destroyed the small green lice on my trees.

East Abington. A. BROWN.

TO KILL PASTURE BRAKES.

Mow them closely in dry weather, and rake the brakes off at once so as to expose the roots as much as possible, or put on ashes pretty freely, and it will kill them. S. F.

Houghtonsville, Vt.

POTATO-STEM BORER.

Asa G. Sheldon, Esq., of Wilmington, a gentleman whose observation is as keen as his judgment is sound, brought us a potato-stalk which had been entered by a worm an inch long, with a copper-colored head and twelve legs. The entrance was made near the root, and he had gone up the centre of the stem some six or eight inches, eating clean as he went all the pulpy part of the stem.

Who is he, and how much mischief does he do?

—

DISEASED PEAR TREES.

I am much troubled with a disease in my pear trees, and do not know what it is. Some call it *sunblight*, others say it is caused by frost. After losing several trees, I have saved others by shaving off all the affected bark. I hope some of your correspondents will tell me what the trouble is, and how I shall remedy it. Peter Wait.

Danvers, July, 1855.

—

Crops of all kinds look well. Hay is coming in better than last year. A. F.

Middlebury, Vt.

For the New England Farmer.

"THE OTHER PLACE."

"You can't own all the land that joins you," is a saying old and sure, yet how few Yankee farmers seem to believe it. If the mania for owing land in large quantities could be exchanged for a mania for owning good land, and good cattle, New England would thrive without agricultural papers; but as that good time coming is not likely to be forthcoming soon without assistance, all good farmers will look to the press, that corrector of popular opinion, as their deliverer.

But to return to my text, which I think will need no explanation, for who has not heard of the term? In some parts of Massachusetts, no farmer is considered forehanded, or, I should say, considers himself so, until he owns an adjoining farm, which generally takes the name of "the other place." That this acquisition is the beginning of trouble I will not say, but that in most cases it brings more trouble and perplexity than profit or comfort, I will unhesitatingly avow. That this is necessarily the case, I do not say, but generally, when a man adds one hundred acres to the two-hundred acres of land already acquired, he has little idea of employing any more help on the farm, and certainly not in the house, nor does he think of keeping better cows and improving his stock; his mind is too much occupied with number; he is thinking of the number of acres he will own, the number of acres he will have to mow over, and the number of cows he will keep. Quality has so little to do with his calculations, it would be hard to make him believe that the profit from two acres, well cultivated, would be more than the profit from three acres with the same expense and labor applied that the two acres received. On this point I feel inclined to differ with him, and if I am in error, I trust some correspondent of the *Farmer* will set me aright. Yeoman.

Brookfield, July, 1855.

For the New England Farmer.

SMALL POTATOES.

Mr. Editor:—In the fewest words I will answer and explain to your correspondent, "S. P." (I hope I am addressing my own sex.)

My communication upon "Small Potatoes," touching his supposed errors, he thinks "a tissue of several fallacies, common to reasoning on agriculture." This long whip reaches others as well as myself, who have the temerity to express an opinion upon this subject.

I said there was but one *right way* in farming, however much practice might vary. I still maintain the correctness of the principle. He says, "to follow this, is a prolific source of trouble." I would ask why? I will admit there are more ways than one, yet one general standard supposed and practiced as *right* is adopted.

There are two ways to gather your winter apples, delicate peaches, pears, &c.; will you hand-pick or shake off? Two roads lead to the mill; is there any choice? Would you employ a bungler or a good farrier to shoe your horse? In surgery, in fact in all practice, the *right way* has its single interpretation, while the wrong way might be the result of ignorance or stupidity. If "all nature is against" the one *right way*, it is no paradox that square is round or perpendicular is horizontal.

Your correspondent recommended "small potatoes" as seed, and illustrated by two strong examples. He said the native tuber was "small," but a "large growth was artificial. He again says, "large tubers and cabbage heads are of artificial growth." Nature gives but one principle, vested in the germinating power of the seed, according to its size and functions. This is its law—man applies his skill equally, large and small is the natural or real, not the artificial result. I hope this will not be considered as "one hypothesis to prove another," or a "theoretical speculation."

"Grain is not potatoes," says "S. P." Another man says, "a chestnut horse is not a horse-chestnut." All very true—but which has most affinity? In their cultivation and uses, there is certainly a friendly alliance between grain and potatoes. Mr. Editor, this may be a profitless discussion; it is certainly beyond an arms-length battle, the combatants being strangers and far apart. My object has been to state to farmers my own positive experience and the practice of others.

This morning a large farmer laughed at the idea of planting small potatoes; he says two to four vines in a hill from large potatoes two feet apart, is full enough. On this point I am convinced it is the *one right way*.

The flat farms of Flatland and Flatbush are loaded with potatoes, corn, winter wheat, rye and grass—wheat and rye, very full. Many square miles checked off with rail fences, indicate that one king farmer directs the whole: not a stone to jar your wheels, or a fruit tree (save now and then a cherry) amid all the luxury. Neat white houses, Dutchy in shape and trimmings, such as solid shutters, painted black with strap hinges, &c., all presenting a great contrast to the farm vicinity of Boston. Weather has been bad for haymakers—also much wheat is down.

Pardon the length—will be more brief in future.

Brooklyn, L. I., July 14. H. Poor.

For the New England Farmer.

MOWING MACHINES.

Many experiments have demonstrated that an acre of grass can readily be cut by one of these machines in forty minutes. Such was the fact in the experiment at Salem, July 16, when one team cut a quarter of an acre in ten minutes; and other teams in less time, as reported.

Of this I had some doubts, until this morning, I saw a well trained team of horses, under the direction of a skilful driver, pass around a lot of herdsgrass, 12 rods by 30, and so continue to go round and round, until the whole was laid completely flat, in less than two hours. The machine used was Ketchum's, with latest improvements, and the crop of more than one ton to the acre, was spread as even as I ever witnessed. After such operations, oft repeated, no one can doubt that machines of this character are destined to come into general use.

Suppose a machine to cut a swarth one-quarter of a rod in width, it will readily be seen that a team will have to move only *two miles*, to complete an acre. Or suppose it to cut a swarth one yard in width, then it will have to move less than *three miles* to complete an acre. There are few teams that will not do either of these, without urging. I cannot doubt that machines will, ere long, be so constructed, that one horse will do this work with ease, when skilfully directed; and then one-half of the hardest labor of the man, will be changed from the shoulders of the man to the shoulders of the beast, for whose use this fodder is gathered.

Salem, July 27, 1855.

P. S.—I say nothing of the operations of other varieties of machines, such as Manny's and Russell's, because my purpose is to speak only of what I have myself witnessed. But if rumor is to be credited, some of these, when in order, have done quite as well as Ketchum's. Like the use of the plow, much will depend upon the *team* and the *driver*. I am not unmindful, that it has been known for many years that grass could be thus cut: still, so true is it, that cultivators of the soil are slow in introducing new modes of operation, that many of the best implements now in use have had a hard struggle before they came into general favor. Who would now consent to dispense with cast iron in the structure of the plow? Still, who does not remember how its first introduction was ridiculed?

PAINT FOR HOUSES.

We recently published a few directions on this subject, which seem to us important. One who seems to be versed in the subject, as a practical painter, makes other suggestions, in the *Indiana Farmer*, which we are disposed to endorse. He says: "It is no easy matter for some painters who pretend to considerable experience in their art, to paint the interior of a house in a proper manner. White lead and oil, mixed as for outside use, will dry, it is true, and preserve the wood-work; but before three months, the paint will become almost yellow, and have exactly the appearance of being smoked. This is not the case with external painting, because the light and air bleach the paint precisely as it does linen or cotton cloth when exposed in a similar way.

To paint white in the interior of a house, very little linseed oil should be used, except what the white lead was at first ground in. Spirits of turpentine should be the principal fluid used to mix the paint, Japan being added in small quantity as a dryer. The first coat, or "priming," should be mixed with linseed oil alone, being well rubbed down when dry, with sand paper. Two coats should afterwards be put on with the turpentine alone, the last coat being rather the thickest.

To make a very handsome white finish, for parlors and other nice rooms, after putting the paint on very carefully, Gum Demar varnish should be put on over all. This makes a beautiful gloss, and keeps the paint of a brilliant white all the time. Should the paint become dirty, it can be washed off as easily as a pane of glass, using nothing but warm water, as strong soap destroys the varnish. Every house-builder desiring a permanent, brilliant white finish to his rooms, should use this varnish. It answers a very good purpose to mix it in with the last coat of paint, making a much handsomer finish than when not used at all, but much the best way is to give the entire work a coat of the varnish after the painting is finished and partially dry.

Kitchens should be painted a light slate or lead color, made by mixing a small quantity of lampblack with the white lead; particularly the doors, mantel-pieces and wash-boards. The floors of porches and kitchens may be painted with the same material, or they will look pleasant and cheerful if yellow ochre is used, ground up with linseed oil and Japan.

In putting on green paint, slate color should first be used as a priming, two coats of the green being added afterward. Paris green makes the brightest color, and must be ground in oil, adding Japan as a dryer. Chrome green makes the deepest and most permanent color, and white lead is used to temper the paint to the proper hue.—*Ohio Farmer and Horticulturist.*

For the New England Farmer.

RAPE, OR COLE PLANT.

RESPECTED EDITOR:—In reading your valuable paper of June 30th, I noticed that "A. B." of Sudbury, Mass., made an attempt to cultivate the *rape* or *cole* plant, which proved unsuccessful, which may be attributed to the season of sowing, which should have been done in the fall.

Having been anxious myself to obtain some vegetable oil which might be used as a substitute for the unwholesome fat of the swine for culinary purposes, I have made some investigation concerning the various kinds of vegetable oils, and find that *rape seed* produces a very beautiful, inert and pleasant oil, which is greatly admired and much used by the French, taking the place of lard in the kitchen. A Frenchman who had used an abundance of the oil, and from whom I obtained the most of my information, assured me that one bushel of the seed would produce three gallons of oil. Of this I have no other proof than his statement, but am confident from expressing a few seeds that they are very productive of oil. I have been entertaining hopes that some one would make an attempt and give the result of his experiment to the public.

In the fall of 1848, I procured a small quantity of seed, which I kept until the next year, and sowed about the first of September; it came up, grew well, and made a good head or top before cold weather came on. I let it remain in the ground

until the next spring, when the plants started and grew very finely, producing nearly a peck of very fine seed, which was matured by the last of June. I found it to be very productive, but as there was no mill for making oil in this region, I did not attempt to cultivate any more, but think it may be cultivated to advantage with the following precautions. All who are acquainted with the turnip class or family, know it to be a *biennial* plant, requiring two seasons to mature the seed. It is so with rape, and it must be sowed in the fall, in season to make good root and top, and if the roots or plants are well covered with snow during winter, and not suffered to freeze and thaw in the spring, they will produce a good crop of seed.

Those who are fond of greens can get a good supply early in spring, without detriment to the plants, if they do not pick off the centre stalk. If "A. B." will try again and sow in the fall, he will, undoubtedly, meet with good success. F. A. F.

Shaker Village, N. H., July 9.

WHY IS THE FARMER DISCONTENTED?

We propose to discuss the question propounded above, in three or four articles, from time to time, and quoting pretty freely from addresses which we have delivered before lyceums and at agricultural fairs.

There is an instinctive desire in the breast of most persons to leave the noise and confusion of crowded places, and retire at some time to the peaceful village and the quiet of rural life. The tradesman and artizan, weary of their confinement, long for a wider field of action, while the merchant, harassed by the exposure of his property to the fickle elements, and the danger to those who go down to the sea in ships, sees in the distance the evening of his days embellished by the comforts clustering around a home in the country. Others possess the taste for a home on the farm from early youth, and when separated from it, are ever elevating the old roof-tree and the happy haunts of childhood above all the pomp and glitter of cities, and the trappings of fashionable life.

For us, the farm has ever had this charm, and its implements are familiar to our hands, and the opinions we express have been formed *on the farm*, while engaged in its labors and enjoying its pleasures. We look back to its renovated precincts with as much tender solicitude as does the graduate to his beloved alma mater, and live over our youth again in the recollection of its delightful labors, scenes and recreations. But since those times, great changes have taken place in the modes of cultivating the soil, as in most of the business men pursue.

Facilities in printing and publishing have kept pace wish other improvements of the age. The exact experiments of the scholar, the accurate observation of the farmer, dissertations, pamphlets and newspapers have been multiplied without number, through the magic power of the press. In these have been discussed the manual operations of the farm; the plowing, planting, haying, draining, subsoiling, and nature of the soils; and, although much may well be said upon each of these fruitful topics, we shall not occupy space with more than a casual reference to any of them.

It was once supposed that the profits of the farm, and the beauty of the homestead, depended upon the *hands*, alone. That error has had its day, wrought its evil and departed, we trust, never to return. A better opinion now prevails, that *labor*, to be profitable, must be guided by *intelligence*, and it is of the *importance* of that intelligence that we propose to speak.

On the rugged mountains and beautifully sweeping vales of New England—on the broad prairies of the West, and the sunny acres of the South, the same causes are operating against an earnest and hearty love of rural life, and its occupations.

We assume the fact, that great discontent exists in relation to that life; that young men and young women are dissatisfied with the employments of the farm, and are seeking in speculative schemes that aliment for the mind, which they have failed to find in rural occupations, and a quiet home.

If we can suggest a remedy for this evil, we shall deem it of more importance than to throw new light on the common business of the fields, and the barn, or to enforce any principle of vegetable or animal existence.

Large numbers commence farming, without other capital than their own physical force, directed by their native good sense. They succeed in establishing a pleasant home, and in educating and rearing a family, through long and patient industry, and careful economy; and this is the manner in which those engaged in mercantile affairs, who have become wealthy, have acquired that wealth; by unintermitted effort, both in acquiring and saving. And the cases are somewhat rare, where the young farmer of good health and habits, fails of establishing an attractive home, and acquiring a competence; while it has been ascertained that out of every one hundred who have entered upon mercantile pursuits in the largest city of New England, upwards of ninety have failed. The startling but well authenticated fact, should have an influence on young men embarking in business, and upon young women, too, about making alliances which can only end with life; for they are equally interested in the welfare and happiness of the family.

Farm work requires a capital in coin, in talents, and in muscle and sinew, as well as in merchandizing and navigating the ships of commerce. When this capital is invested, farm-work is no more a labor of drudgery than any other—it is not half so much so. If this be drudgery, what shall we call the confinement of the law-office and the court-

room, or the judge's bench? What the dull routine of the merchant's duties behind the counter, with his daily liability to protested notes and bankruptcy? What the daily task of the mechanic, happy if released after a ten hours' toil, or that of operators in the cotton-mill, summoned by bell and encased in codes of regulations? No—it is not the employment of the fields that is drudgery—it is the *man's mind*, that is enslaved. That mind does not spring from the sod, buoyant with life and intelligence, searching and inquiring into the wonderful operations above, beneath and around him.

Let him turn his thoughts to Chemistry in its relation to his employment, and he will soon be convinced, that no man has yet lived long enough to understand the strange yet beautiful operations constantly carried on in his trees, plants, flowers and animals. The lawyer is tied to his terms, and the merchant to his counter; the physician to his never-ceasing horse-mill rounds, the clergyman to his parish and the mechanic to his bench. But the farmer breathes the free winds of heaven on his hills, and drinks from the crystal springs that flow through his valleys. The first beams of the morning sun touch his brow amid the waving grain of his garnished fields, while he bathes his feet in the cool dews that have gathered upon the bending grass. He reclines at noon in the shade of his old trees, and walks among his springing corn, or profits by the cheerful criticisms of his wife and children upon his garden culture, as they stroll among the plants he is rearing. He goes to mill or to market at will;—attends the County Fair in autumn with his fat oxen, lusty steers, or mammoth vegetables; takes a premium on orchards, bog meadows, or corn and cabbages, while his wife bears off the palm for making the best butter, and his unmarried daughter receives the silver goblet for the best loaf of wheaten bread. He finds a day to look in upon the General Court; or, perchance, is a constituent part of that honorable body himself. He is the man to conduct the town business, for a referee, for a juror, or for any other honorable calling.

While cultivating the fields, he is in the schoolroom of nature, and it is his own fault if he does not study her ways, and make her subserve his purposes. She calls to him from her mountains, and valleys, and streams, from the air that cools his heated brow, and the dust beneath his feet. She pleads constantly for his attention through the birds of the air, and the beasts of the field, in the change of the seasons, in showers, sunshine, frost and vapor. Is there no voice in these, to him who tills the ground or fells the forest? Are these all a sealed book to him, because he is a tiller of the soil? If so, he should awaken to their perpetual call, be led to a consideration of the delights which are hourly offered to his mind, and rejoice in gratitude that he is permitted to be free upon the acres which he is gladdening by his care.

PUSH ON!

BY HENRY J. SARGENT.

Awake! and listen. Everywhere—
From upland, grove and lawn,
Out-breathes the universal prayer,
The orison of morn.
Arise! and don thy working garb;
All nature is astir;
Let honest motives be thy barb,
And usefulness thy spur.
Stop not to list the boisterous jeers,
(He would be what thou art,)
They should not e'en offend thine ears,
Still less disturb thy heart.
What though you have no shining board,
(Inheritance of stealth;)
To purchase at the broker's board,
The recompense of wealth—
Push on! You're resting while you stand;
Inaction will not do;
Take life's small bundle in your hand,
And trudge it briskly through.
Push on!

Don't blush because you have a patch
In honest labor won;
There's many a small cot roofed with thatch
That's happier than a throne.
Push on! The world is large enough
For you, and me, and all;
You must expect your share of rough,
And now and then a fall.
But, up again! act out your part—
Bear willingly your load;
There's nothing like a cheery heart
To mend a stony road.
Push on!

Jump over all the *if's* and *but's*;
There's always some kind hand
To lift life's wagon from the ruts,
Or poke away the sand.
Remember, when your sky of blue
Is shadowed by a cloud,
The sun will shine as soon for you
As for the monarch proud.
It is but written on the moon
That toil alone endures;
The king would dance a rigadoon
With that blithe soul of yours.
Push on! You're resting while you stand;
Inaction will not do;
Take life's small bundle in your hand,
And trudge it briskly through.
Push on!

POISON OF CHERRY LEAVES.—A lady informs us that the poisonous effects of cherry leaves upon animals, as noticed in the *Farmer* a week or two ago, can be remedied, by giving the animal a mixture of vinegar and chalk in the proportion of ½ pint of vinegar to 2 tablespoonfuls of chalk. The remedy has proved effectual in several cases.

LIME WILL DESTROY SORREL.—Edmund Ruffin gives, in the last number of the *Southern Planter*, the experience of thirty-four farmers, on the subject of lime, as a remedy against sorrel. Their experience is from nine to thirty-six years, and their unanimous opinion is, that marling or liming, in proper manner and quantity, will entirely destroy the growth of sorrel, and prevent its return.

For the New England Farmer.

LITTLE THINGS:

Or, a Walk in My Garden.....No. 1.

One of my many sources of enjoyment is derived from a survey of my garden, at least twice a day. It affords me much pleasure to know that my practice now and then conforms to the experience of others. The first thing I noticed in my ramble today was an

ORANGE QUINCE.

I transplanted it a year ago to the border of an asparagus bed, but was in doubt whether it would do where so much salt had been spread over the ground. It grew finely, and has been covered with blossoms, the present season. I recently saw an article in the *Farmer*, recommending salt for the quince, and this seems to confirm its use. On the border of the same bed are some

HOUGHTON SEEDLING GOOSEBERRIES,

which have thrown out shoots the present season two and a half feet already. I must attribute this unusual growth to the deep trenching of the bed, which was made four feet in depth, and filled with alternate layers of earth and manure. Against a wall near by, are some

GRAPE VINES.

I have learned one lesson from sad experience. In this latitude, it is absolutely necessary to protect grape vines during winter, and on laying them down, if placed on the ground and covered up, they are quite sure to be killed, especially if there be any water on the ground. I adopted the plan last winter with my sweet water grape vines, of placing on the ground a good layer of spruce or fir boughs, laying the vines on them, and covering them with the same. They came out in the finest order, while my Isabella was badly injured for want of a similar protection.

Pursuing my walk, I look at a few hills of early

CUCUMBERS.

I brought these forward in the cheapest possible manner, simply by making a deep hole, putting in good manure, and placing around the hill four bricks laid flatwise, and on them a square of glass. Broken glass from the stores will answer just as well, which the shop-keeper will give you. After the plants are up, slip off the glass during the day in warm weather. The bricks absorb the heat of the sun during the day, and retain it during a portion of the night. They commenced blossoming the fourth of July, which is at least two weeks earlier than they can do in open air, in this vicinity. Among the many plans adopted, I have met with none better than this.

Stepping along, I saw with pleasure my

PEAR TREES,

which have grown better than any of my neighbors' trees, I suppose, because I saturated the mulching last year occasionally with soap-suds and liquid excrements. (*a.*) Just over the fence I see a native apple, which I call the

BETHEL BELLE APPLE.

I regard it the best grower and bearer of any fall cooking apple in this vicinity. The original tree has borne every year for eight years past, and nearly the same in quantity each year. The wood is remarkably healthy and vigorous, as has been proved by grafting into other stocks. The original tree has supplied my family of eight or nine persons with cooking apples from the first week in August till the middle or last of November, besides furnishing a supply for drying. It now hangs full. Attention is not sufficiently paid to secure good cooking apples in our collections of fruit.

This walk has afforded me pleasure enough for one day, a pleasure free from alloy, and especially from the cares of professional life. Who believes that Adam and Eve were not happy while in the Garden of Eden? N. T. T.

Bethel, Me., July 5, 1855.

Remarks.—The writer of the above is a stranger to us, personally, though from the tone and spirit of his frequent communications, we cannot but feel the interest and attachment of a brother. This article is not only brief—a cardinal virtue in newspaper writing—but it is terse, compact, pleasantly expressed, takes up a single point, discusses it, and lays it down a perfect work, finished in all its parts.

(*a.*) In connection with "N. T. T.'s" practice of manuring his *pear trees*, we wish to utter a single word of warning. Soap suds and water from the chambers are undoubtedly among the best fertilizers we have for any plants, but they must be used in a diluted form. In seasons of drought they are particularly dangerous; as they are not diluted and washed through the soil by rains. We know now of dead pear trees and choice grape vines that undoubtedly were killed by the application of undiluted chamber ley and soap suds during the extreme drought of last summer. They may be used with great advantage, and in unlimited quantity, if greatly reduced in strength.

For the New England Farmer.

THE CROPS AND SEASON IN NORTHERN NEW YORK.

April was a cold and wet month; vegetation made but little progress during the month, even the pastures looked as barren as in the month of March. May came, with its cold and dry winds, and scarcely any rain fell during the whole month, vegetation languid, the cattle on the hills lowed for food, but the farmer had no hay or grain to give them, for the contents of his barns and granary were exhausted. June at last came, with abundance of rain, but cold; grass grew, though thin, from being killed by the ice and excessive freezing during the winter. July came forward with warm weather, the 2d day, the thermometer indicated a degree of heat that was oppressive to man or beast, 90°, and for the past 17 days the thermometer has ranged at 2 P. M., from 74° to 90°, which has produced, with suitable showers of rain, a wonderful change in the whole vegetable kingdom. Rye, oats and potatoes now look finely, and bid fair to become a good crop, but corn is backward. The black cut worm, in this vicinity, has injured the crop very much. I planted about the 10th of May six acres on greensward that had been to pasture for 15 years; the corn came well and looked nice, when it first made its appear-

ance above the ground, but in 10 days time the worms had destroyed two-thirds of the spears in the field. At first hoeing I replanted the field, or the missing hills. Now, where the first planting stands, it is waist high, and the second planting is about one foot in height. I am of the opinion that should the weather prove favorable, the second planting will prove nearly as good as the first. This is the case with those who planted on old pasture land. Most of those who planted on lands that had a crop of some description on last season, the worms had not injured at all. The farmers in this vicinity have put in more crops this spring than common. Most every farmer has sowed his spring wheat to supply his family with, during another season, and the crop generally looks finely. Most farmers for the past ten years have depended upon buying western flour to bread their families with, for they said that the crop of wheat was so uncertain that they had rather trust oats than wheat. But the high price of flour has caused a revolution in their opinion, and in fact has drained their purses to the bottom. My policy has been, since commencing farming for myself, to raise my wheat; then I was not dependent on a foreign state for my bread; and for the past eight years I have annually raised about two acres of spring wheat, and have not as yet failed of raising a decent crop of wheat. My plan has been to sow my wheat upon land which was the previous year planted to potatoes; the ground is well mixed and subdued by the process of hoeing and digging the crop of potatoes; then plow and sow my wheat, after liming, as early as I can, say by the 15th of April, this season I did not sow till the 21st, on account of the land being wet and cold. The hay crop is light and backward. Meadows in this vicinity, by the excessive drought of last season and the ice of last winter, have been killed out very much. I predicted in the month of April that let the season be as favorable as it could be, we must have a short crop of hay. New seeded meadows are generally very thin, all those which have been laid down the past three years. Yours truly, J. PECK.

Low Hampton, N. Y., July 17, 1855.

For the New England Farmer.

A POTATO WORM.

MR. EDITOR:—Mr. J. P. Knowlton, of this town, on visiting his potato field, to-day, discovered in the vines what he believes to be the cause of the potato rot. He brought several vines from the field, which before being cut off, were more or less wilted at the extreme tops; and on examining them with him, we found in each a hole made near the bottom of the vine, about the size of that made by a buckshot. On splitting the vine from the hole towards the top, its pith was found to be entirely eaten out, till we discovered a worm in close though comfortable quarters, from four to six inches from its entrance. The worm is about one inch in length, and of a light pink color, its back being brown half its length from the head, which was crested.

Mr. Knowlton's potatoes were planted in good soil, on high land, and the vines, as most every where else, never looked more flourishing, being in blossom, and the potatoes just forming. Judging from the present appearance and the amount or extent the worm has eaten, they must have commenced hostilities but a few days since. Any further information of the above character we shall be most happy in affording, when such facts come before us.

Corn in this vicinity looks very promising, and also grain of all kinds. Pumpkin and squash vines are rapidly reaching out for more extended territory. I have seen some within a few days that would measure from six to eight feet in length.

Hay comes in very light. It is estimated at "two-thirds" crop, though some will cut much less than this. The dull weather at present is a serious check to haymaking operations; still there has been a good quantity of very nice hay secured already.

Gardens are presenting an unusually fine appearance, and will pay a great per centage on outlay of time and money; the one most worthy of notice being that owned by DAVID ROBERTS, Esq., of Salem, which has for its principal feature between *four and five acres of onions*, the most thrifty and promising of any in our wide community.

Hamilton, July 21. Z. A. APPLETON.

REMARKS.—The worm described above is the same as that sent us by Mr. Sheldon, of Wilmington. Its ravages have not yet been extensive.

A SHOW OF DAIRY STOCK.

The Trustees of the "Massachusetts Society for Promoting Agriculture" propose to the farmers of the State, a Show of Dairy Stock, at Worcester, on the grounds of the Worcester Agricultural Society, and with the assistance and accommodations which have been liberally offered by that society, on

THURSDAY, SEPTEMBER 27, 1856.

And they have authorized the undersigned to offer the following premiums.

CLASS I.

For the best six Dairy Cows, which shall have been owned and kept together from July 1, 1855, to the day of the Show, and at least three of which cows shall have been bred and raised or imported by the competitors.

A first premium of	$250
Second premium	200
Third premium	150
Fourth premium	100

CLASS II.

For the best four Dairy Cows, owned and kept from July 1, 1855, to the day of the Show, at least *one* of which shall have been bred and raised or imported by the competitors.

A first premium of	$150
Second premium	100
Third premium	60
Fourth premium	40

Notice of intention to compete for either of the above premiums, must be given in person, or by letter postpaid, to Benj. Guild, Esq., Secretary of the Society, at Boston, on or before the 1st day of December next. The period of trial will extend from Dec. 1, 1855, to Aug. 31, 1856, both inclusive.

CLASS III.

For the best Durham Cow	$50
Next best	35
For the best Devon Cow	50
Next best	35
For the best Ayrshire	50
Next best	35
For the best Alderney	50
Next best	35
For best Cow of any other pure breed	50
Next best	35

Premiums will not be awarded in this class unless the milk of the competing Cow has been manufactured into butter, or cheese, and an average daily yield of 1 lb. of butter, or 3 lbs. new milch cheese, weighed as ready for market, obtained therefrom for the period of six months, preceding the 1st of September, 1856.

Regard will be had in making the awards, to the ages of the animals, the number of cows kept together, their food, and the consequent comparative expense of keeping, and their product.

CLASS IV.

For the best Cow of any breed, (from a herd of not less than 3 cows,) which shall have been owned by the competitor from July 1, 1855, to the day of the Show, kept for the manufacture of butter or cheese, for a period of six months, immediately preceding the 1st of September, 1856,

A first premium of.....$50
Second premium.....40
Third premium.....30
Fourth premium.....20

Premiums in this class will not be awarded unless there has been an average daily yield of 1 lb. butter or 3 lbs. new milch cheese, for the whole period of trial, weighed as ready for market.

CLASS V.

For the best Cow kept for milk, and owned by the competitor from the 1st day of July, 1855, to the day of the Show.

A premium of.....$40
For the next best.....30
Next best.....20
Next best.....10

Premiums in this class will not be awarded unless there has been an average daily yield of 25 lbs. of milk for a period of six months immediately preceding the 1st day of Sept., 1856.

Competitors for all the above classes of premiums will be required to file with Wm. S. Lincoln, Secretary of this Committee, on or before the 10th day of September, 1856, their statement in writing, under oath, or affirmation, to the following facts:

The age and breed of the Cow; the place where, and person by whom, bred and raised, or imported, the time of being dried last, and of last and of next calving;

Time of turning to pasture;

The whole number of Cows constituting their dairy; and whether kept together;

Quantity of milk yielded by each competing cow, ascertained by the weight and beer measure, of each milking after strained, for the first three days of each month of trial, and when the milk is manufactured, the amount of Butter or of Cheese yielded by the competing animals during the whole period as specified in each class. In classes No. 1 and No. 2 the milk of the competing cows may be manufactured together. In all cases the amount of Butter and Cheese produced by the milk of the three days must be ascertained. It will also be required that the statement shall give full and accurate account of the times of stabling, the method of management of the entire dairy during the period of stabling, the process of manufacture pursued, and the kind and quantity of every article of food furnished the animals, either while in the barn or at pasture, distinguishing between said periods.

CLASS VI.

For the best Durham Bull, not less than 1 year old....$50
For the second best.....40
For the third best.....25
For the best Devon bull, not less than 1 year old.....50
For the second best.....40
For the third best.....25
For the best Ayrshire Bull, not less than 1 year old.....50
For the second best.....40
For the third best.....25
For the best Alderney Bull, not less than 1 year old.....50
For the second best.....40
For the third best.....25
For the best Bull, of native or mixed breed, not less than 1 year old.....50
For the second best.....40
For the third best.....25

A written statement under oath, signed by the competitor under this class, must be filed with the Secretary of this Committee, at the time of entering the animal, giving the age, breed, place where raised, person by whom bred and raised or imported, method of management and kind and quantity of any article of food furnished, other than Hay or Grass, subsequent to the 1st of March, 1856.

In all cases competitors must be the actual owners of the animals entered by them, on the first day of July, 1855, and such ownership must have continued to the day of the Show.

No animal will be allowed to enter into competition in more than one class.

All animals offered for competition must be entered with WILLIAM S. LINCOLN, the Secretary of this Committee, in Worcester, on or before Wednesday, the 26th day of September, at 12 o'clock at noon, and must be exhibited upon the grounds of the Worcester Agricultural Society, on the day of exhibition, at 8 A. M., and remain till 3 P. M.

TRAVEL.

The Trustees will pay at the rate of 12 cents per mile to the owners of such animals as obtain premiums, and which are brought or driven more than 10 miles from the place of exhibition, computing from the place from which the animals come; also to unsuccessful competitors the like sum, if upon the report of any Committee, such an indemnity for expense should be merited. Travel will only be allowed one way, and only one travel will be allowed to any competitor.

Blanks for return of particulars required in the certificates will be sent to persons who give notice of intention to compete.

A rigid adherence to the foregoing rules will be required.

Skilful men from different parts of the State will be seasonably appointed to adjudge the premiums, and no premiums will be awarded in any class where animals of sufficient merit have not been exhibited.

☞ Premiums will be paid by THOMAS MOTLEY, Jr., Esq., Treasurer, at Boston, thirty days after their award, but if not claimed within six months, they will be considered as relinquished.

ROBERT C. WINTHROP,
GEORGE W. LYMAN,
JAMES W. PAIGE,
STEPHEN SALISBURY,
WM. S. LINCOLN,
} *Committee.*

Boston, June 13, 1855.

CONSTITUENTS OF BODIES.—The muscles of a body are what is usually called *lean meat*—the skin, hair, horns, and hoofs are glue—this shows why they are good for manures, as glue contains fifty-five per cent. of carbon, eighteen of nitrogen and twenty two of oxygen.

THE CURCULIO

This little depredator seems to defy the effort of all those persons who have attempted to do away with its ravages. It is indeed a true weevil, as much so as the *Curculio granarius*, or grain weevil, which does so much injury to housed wheat.

The popular opinion that the plum weevil, (*Rhynchænus nenuphar*,) otherwise known as the curculio, cannot fly, is a mistake; for its wing-sheaths cover two transparent wings, by means of which it is enabled to pass from plum to plum, and deposit its eggs. Before depositing an egg it makes a crescent-like puncture in the particular plum in which it is about to be laid, which will soon be hatched, producing a whitish, footless grub, having a light brown head. Indeed, in some instances I have found as many as three larva in a single plum, but this is a rare occurrence. The young larva then feeds upon the plum, and eventually finds its way to the stone, the passage being oblique and very irregular. Soon after the eggs have been deposited, gum begins to exude from the fruit, and in some instances in very large quantities. This exudation seems to so prevent the full development of the fruit, as to cause it prematurely to fall from the trees, thus permitting the insects, when about to change to the pupa state, to pass into the ground. Between three and four weeks seems to be the time necessary for them to undergo this metamorphosis, when the perfect weevils come forth ready to add to the injuries perpetrated by their progenitors.

The perfect insect is about two-tenths of an inch long, and furnished with a snout, by means of which it is enabled to bore the fruit. The hind part of each wing-case is furnished with a yellowish spot. The wing-cases are of a blackish color, their surface being ridged, and presenting an elevated appearance in the centre.

Plums are not the only fruit attacked; nectarines, peaches, cherries, apples, and quinces, are also preyed upon by the curculio. I have been told that not even peaches in the southern States are exempt, but I have had no opportunity of making any observation corroborative of this statement.

Not one of the numerous remedies proposed for doing away with the ravages of this little tormentor, has yet brought about the desired result. It seems to me that one important observation has yet to be made. I refer to state and place in which it passes the winter; for if this fact were fully brought to light, it would be some clue to a preventive.

It should be borne in mind, however, that in the absence of more accurate knowledge, such remedies as have a tendency to lessen their evil doings, should be observed, such as the gathering of the fruit at intervals during the season, which should be burned, thus killing the grubs, so as to prevent all possibility of their passage into the soil. To destroy them while in the grub state is an excellent practice, for by preventing their undergoing the natural change, and coming forth weevils, the future production of countless myriads is prevented. In order to lessen the injuries of those which have already come forth as perfect weevils, a sheet should be spread upon the ground around the body of a tree, and if the branches be suddenly jarred, some of the weevils at least will fall, when they may be collected and destroyed; for when disturbed, they gather their legs and snouts close to their bodies, and unless under close examination, present a lifeless appearance. If this precaution be frequently made use of, the deposition of many eggs, and consequent production of insects, will be prevented. The numerous other remedies which have so often been published, such as the application of white-wash and glue, sulphur, lime and water, as well as gas-house lime, etc., seem to be entirely inefficient.—J. PAYNE LOWE, *in Working Farmer.*

THE CANKER WORM.

The recent havoc which this pest has made on the fruit and other trees in this section of Massachusetts, naturally leads our attention to it, although on our own farm at Concord, twenty miles west of Boston, we have never seen one of them.

The habits of this destructive insect have been carefully investigated by men abundantly competent to do the subject ample justice, and who have prosecuted their labors with a zeal and energy entitled to much praise. In HARRIS'S work on "Insects Injurious to Vegetation," there is a minute and carefully drawn account, which all may read with profit. The "canker moth" is the *Phalæna vernata* of Professor PECK. The insect is thus described:

"His antennæ, or horns, are thread-like; but when viewed through the microscope, are found to be beset, on each side, with a very short, hairy fringe. His wings are thin and silky, and expand about one inch and a quarter. The fore wings have a distinct whitish spot on the thick edge, near the tip, and are crossed by two jagged, faint, whitish bands, more or less distinctly bordered with black lines, or dots. The hind wings are rather darker than the other pair, and have a small dusky spot near the middle. This is the usual appearance of the male, which, however, is subject to some variation in size, and in the greater or less distinctness of the spots on the wings. The females are plump and oval in shape, and are also ash-colored above, and paler or whitish beneath, and measure about three-eighths of an inch in length. They have two thread-like horns, and six long slender legs, and on each side of the belly near the head, there may be seen with a glass, two little scaly tufts, pressed close to the body, where the wings of other moths usually grow."

The coupling of these insects ordinarily occurs very soon or immediately after they emerge from their winter dormitories in the soil, and sometimes before they ascend the trees. The insect is very destructive and very prolific. The eggs are deposited in the bark, in the crotches of limbs, and, indeed, in almost every place where they can be attached. They sometimes appear in clusters of from fifteen to seventy-five in number, but it is not known whether the eggs forming these clusters, are the product of a single insect, or of several; nor has the number of eggs ordinarily produced by a female moth been accurately ascertained. The eggs are

about one-fourteenth of an inch in length, oblong in shape, and deposited side by side, each on its end. A peculiar substance of a very viscid consistency, and which indurates and becomes strongly glutinous on exposure to the atmosphere, attaches them firmly together, and to the tree, or any other substance to which they are appended. These eggs may be easily destroyed by acids or alkalies applied with a sponge or brush.

Professor HARRIS mentions nearly every remedy that has been resorted to in order to prevent the ascent of the worm, and those persons troubled with them should consult his work. Some of them are a broad belt of cloth or strong paper, six to twelve inches wide, fastened around the trunk with strings, and apply the tar as early as the first of November, perhaps in October, and renew it daily as long as the insects continue rising.

Another method is to fit a collar of boards around the tree, and smear with tar underneath. Collars of tin-plate, belts of cotton wool and troughs of tin or lead, filled with oil, have all been resorted to with greater or less success. Showering the trees with air-slacked lime, and sprinkling them with whale-oil soap water, has sometimes proved beneficial.

The apple crop in the vicinity of Boston, where it is usually large, will be greatly reduced this year, through the ravages of these minute yet destructive insects. He who will devise some certain remedy against their attacks, will become a public benefactor.

WILLIS' PATENT STUMP PULLER.

The statement copied from the *N. E. Farmer*, on page 121 of this No., we understand to be from the pen of Lieut. Governor Brown, editor of that journal. Since reading it, we have visited Orange, examined the machine, and seen its power fully tested. It is all that Mr. Brown has represented; and in two or three particulars, we think, is somewhat more;—1st, it is equally as well adapted to drawing out stones, removing buildings, or almost any other business requiring a high power, as to the pulling of stumps; 2d, it will operate without unreasonably severe effort on the part of the men and team, more rapidly than Mr. Brown represents; 3d, it has come to its present improved state, slowly and by successive trials; did not come from the brain of a theorist, as Venus is said to have leaped from the brain of Jupiter, all beautiful and mature; armed *cap-a-pie*, ready to love or to fight, but resulted from the experience of a practical man, one thoroughly schooled in the rough and tumble business of drawing rocks and stumps.

For eight years, Mr. Willis, in as wide a region as can well be found, has been making the rough places plain. He commenced with a rude machine of his own construction, following the lumbermen, and tearing up what of the old pines they had left in the ground. As exigencies required, he made alterations, tried them, and adopted or rejected them, accordingly as they answered, or failed to answer, his purpose—that of pulling stumps to his own satisfaction, and that of his employers. In this way the rude machine with which he began has come, by slow degrees, to be the one he has recently patented. We understand he has sold the right to its use for the four counties, cornering on the place of his residence, and that the individuals who have purchased these county rights, are selling out town rights satisfactorily, while yet it is hardly known beyond those limits. The fact of its slow, practical growth, in connection with the ready sale it meets where best known, would seem to be a strong argument in its favor.

But in commending it, while we are pledged to commend nothing which we do not believe to be worth buying, we are guided principally by what we have seen of its working. Mr. Willis took us into a field, which must have yielded a very large crop of pine boards. His force consisted of two men, neither of whom had ever worked at the business before, and a small pair of oxen. He said, "which stump will you see taken out." We selected the largest, the *ugliest* and the worst situated stump in the field. He hitched to it, as described by Gov. Brown, and lifted the great circle of roots and adhering earth, raising the side farthest from the machine in advance of the other side, till it stood at an angle of 45 degrees. At this point the men knocked off the earth, letting it fall back into the hole, the yellow subsoil at the bottom and the darker top soil above it. He then worked the machine again, and drew it along until the last root was detached. The time of the whole operation did not seem to be more than eight or ten minutes, but was not measured. He then drew up eight stumps, large and small as they came, in 30 minutes, as measured by the watch; and neither the cattle nor the men appeared to work faster than would be consistent with a long and steady pull at the business. He stated, and we thought proved, that he could clear an acre a day, with a force which could be afforded ,including the use of the machine, for ten dollars a day.

We learn from Mr. Willis, that in view of the prospect that he will be able to manufacture but few machines, compared with what will be wanted, he is willing to sell either State or County rights for manufacturing and using them. We advise any who may feel interested in the matter, to visit Mr. Willis at his manufactory, at Orange, which is on the Vermont and Massachusetts Railroad, about 16 miles east of the Connecticut river. He will afford them the best possible means of judging of the capabilities of his machines; and we have no doubt will deal with them liberally. It might not be well for every farmer, perhaps for no one, to be at the expense of procuring one of these machines simply for his own use. But if they were distributed about so that one or two should be owned in a town, and worked by the owner, we should think they might be put to many valuable uses; and especially that they might become an important auxiliary to a neater and more profitable husbandry than that of cultivating around rocks and stumps.—*The Farmer, by Professor Nash.*

TALL RYE.—A correspondent writes us that he saw on the farm of Mr. HENRY COBB, of Amherst, Mass., on the 20th of June last, a stalk of rye 7½ feet in height, and it had not then attained its ful growth.

For the New England Farmer.

LETTER FROM THE COUNTRY.

Sunday — Extensive Prospects — Lakes, Mountains — Recollections — The Haying Season — Prospect of the Crops — Hay Crops — Country Visits and Watering Places — Visit to Lake Massabesic — Chowder — Music — Effect of Location upon Character — Invocation.

Chester, N. H., Aug. 12, 1855.

MY DEAR SIMON:—Forgive the familiarity, my dear Lt. Governor, but it does come *so natural*, addressing you from this, the old place of my nativity, and your childhood, and boyhood, and youth, to call you by the old familiar name, by which, more than forty years ago, I used so often to address you, that you will, I know, excuse *me*, although George IV, never forgave Beau Brummell's—"George, ring the bell!" You are more forgiving than the king, I trust.

This is Sunday morning, and a glorious morning it is too—precisely such an one as old Herbert had in his mind when he composed his beautiful stanzas, commencing—

> "Sweet day, so cool, so calm, so bright,
> The bridal of the earth and sky."

I am not at the "old homestead," from which my brother Henry—I beg his pardon—*the Judge*, dates his interesting letters. Let me say, in parenthesis, that if "my feverish longings for fame, and dreams of distinction," were not all gone, I should be trying to *get in* as one of the editors of the *New England Farmer*—"Governors and Judges!" haven't you a vacant Generalship, or *sich* like, that you could bestow on a fellow? As I was remarking, I am not at the old homestead, but am, at present, sojourning with his Honor, the Sheriff of the County of Rockingham; in good hands, you see, and from this spot where you and I have stood many's the time and oft, at this blessed moment a prospect is presented worth a journey from Boston to witness. You know what a sweep of horizon is presented to the eye from this place—do I exaggerate in saying hundreds of miles? I think not. Well, there it lies, the intermediate space dotted with villages, farm-houses, green fields, forests, &c., all glittering beneath the just-risen sun, and every valley filled with mist, presenting the exact appearance of lakes and lakelets, studded with islands, headlands, and peninsulas—in the far distance gleams, like a thread of silver, what the oldest inhabitants have ever regarded as the ocean. Not one cloud is to be seen, not one breath of air can be felt, and all that row of elegant trees mentioned in the Judge's letter show not the stirring of a single leaf. If a man's thoughts do not ascend through such a scene as this, up to Nature's God, he must possess a hardened heart, and be, indeed, a hardened sinner.

I am here, with all the dear ones of my household, as you are aware, on a visit to my kinsfolk, and to exchange for a short time, the heated atmosphere of Washington City, for the cool and refreshing breezes of New Hampshire. Either those breezes, or the excellent feed with which the Sheriff's better half entertains her visitors, (and you have often tried it,) have already added to the fair proportions of your humble servant, as our friend Greenough's steelyards testify.

I am among the farmers here. Haying is the order of the day. The wet, and somewhat backward season, has delayed the gathering in of the upland crop of grass even to this late day. When you and I used to swing the scythe here, it was not often that we gathered hay from the upland after the advent of August; but this year, I think nearly all the hay in this vicinity has been cut since the 25th of July, and much grass still remains standing. The crop is a good one, and, thanks to the new invention of "hay-caps," it has, notwithstanding the "long spells" of rainy weather, been *got in* well. A friend of ours, who resides here, but spends considerable time in Massachusetts, and who has recently returned from there, told me a few evenings since, that the farmers in the vicinity where he has been, had heard of hay-caps, but had never seen any, and came to him for a description of them. I presume you have enlightened your readers on the subject, though I do not remember to have seen a description of them in your columns. Those used here—and they are getting into general use—are thus made and used; viz:

For one cap, take 4 yards of yard-wide cotton cloth, cut it in two pieces, and sew them together, so as to make a square. Loop up each corner so that a piece of common cod-line will pass through, tie in loops of line, spread the cap over the hay-cock, and with 4 sharpened sticks of about 18 inches in length, fasten the corners, by passing the sticks through the loops, either into the hay or the ground. A cock of hay thus protected, may stand through a long storm, uninjured.

The crops in this vicinity, as all over the country where I have been, promise an abundant harvest.

In the Judge's "Letter from the Homestead," contained in yesterday's *Farmer*, he remarks very properly as follows:

"How rational men and women from the cities can be persuaded to pass the summer at the beaches and fashionable watering-places, parading round on the sea-shore without shelter or shade of any green thing, suffering the tortures of Regulus, who was exposed by his enemies to the noon-day sun with his eyelids cut off—how they can endure the glare of the ball-room in dog-days, and the crowded chambers of fashionable hotels, not to mention the killing conclusion by way of paying the bills—how all this can be translated into pleasure by rational people, when the peaceful, quiet hills and valleys of the country invite them to health and freedom from restraints of fashion and artificial life, passes comprehension."

Exactly the thoughts that have passed through my own brain, when I have been crammed with all

my family into a 7 by 9 room at Saratoga, or at some of the watering-places—hot as blazes—eaten up by flies in the day-time and musquitoes at night, sweating under the glare of gas-light in the ball-room in the evening, and under the burning sun by day. *Do* you remember *our own* experience at Piney Point one burning August? We went *for* pleasure, and perhaps we might, had we been provided with places in which we could have slept, passed some hours (to quote Byron)

"In dreaming this was pleasure,"

but, alas, we could not sleep, and therefore had not even the consolation of the *dream*, much less the *reality*. You have not forgotten it, I know.

Now, if the real health and pleasure seekers, would come here, where the summer days are delightful, and however *they* may be warm, there is always fresh and salubrious air to breathe, and the nights are always comfortably cool, they would find what they seek. And then we have the old forests all around us, and the beautiful lake Massabesic, spreading its broad and pure waters in our immediate vicinity, where we can go and sail and fish, and have chowder, and in which we can bathe and swim, and disport ourselves, fearless of surf and sharks and *sea-serpents!*

Let me describe to you one day of the pleasures of old Chester. On Friday morning last, in accordance with previous arrangements, nearly forty of us, old and young, started for the Massabesic. A large stage wagon was put in requisition, in which nineteen of us were comfortable stowed, and amongst them the Register of Probate of the County of Suffolk and his wife and daughter. The others went in such carriages as they could conveniently procure. We arrived at Auburn between ten and eleven, and found, upon a plateau of land, in front of which, spread far and wide the beautiful lake, and behind which arose, what we modestly term, Mine-hill—in fact quite a tolerable mountain—a beautiful arbor, erected for our accommodation, with a table set the entire length of it, and all the necessary appliances to make us comfortable and happy. The day was lovely. As soon as our preliminaries were adjusted, the party broke into groups. Some went fishing, some sailing, some bathing, and the younger fry were amused by the erection of a swing in an adjoining grove.

At one o'clock, P. M., the chowder, prepared by our excellent host and hostess, was brought on, and the table was loaded with good things, in abundance, and all ate and were filled. Any one would have readily answered to the question of the stage-driver—"all full inside?" as Charles Lamb did—"I don't know how it is with the rest of them, but that last piece of pudding did the business for me!" After dinner, most of the party made an excursion to the top of the hill, from which the view is very extensive and beautiful, and there, beneath the old forest trees, from sweet and ringing voices, were sent forth, upon the summer breeze, tones to awaken the best feelings of the heart. "The Star Spangled Banner" was sung in full chorus. "The Old Folks at Home" were not forgotten. "Auld Lang Syne" came back fresh and glowing, and many other songs of the olden and of the modern times rang out on the joyous air. The party from the hill having retired to the arbor, and all being there assembled, "Auld Lang Syne" was joined in by all who could raise a note, and then the party prepared for its return. On the way back we paid a visit to "The Devil's Den," but, his Majesty being out, our stay was not long, and, at sunset, we were all safely back at our respective domiciles, perfectly satisfied that we had spent the day in a manner as satisfactory as it could well be spent.

In this region of country, cultivating the soil is the main purpose of the people; of course there is nothing of the starched and stiff formulas of the city. Every man, woman and child is taught to wait upon him or herself, and consequently every man, woman and child is independent, and all is free and easy in their social intercourse. A hearty welcome is given to all comers who are entitled to be esteemed for the ordinary virtues of life—talent is respected, as it should ever be, in the humblest individual, but *rank* and *dollars* cannot purchase either respect or attention, unless combined with adjuncts deemed of far greater importance—the power to instruct, or please, or to render those about you contented and happy.

The location of a people, as it seems to me, has much to do with their characters. Here, where an immense expanse of country is ever open to the view, the tendency of the mind, as it gathers in knowledge, is to expand and become enlarged in all that does honor to human nature—the soul swells as the eye embraces a magnificent prospect, and one with an imagination whose vision has never embraced more at a time than the single street of a city, would go almost into ecstacies, could he be suddenly placed at any point like this, where the eye could rove over thousands of square miles of landscape unimpeded. Then the natural tendency of the opening mind, whose daily vision is thus enlarged, is to enlarge with it, and to become generous and noble in its impulses!

God bless the good people of old Chester.

Very truly and faithfully yours,

B. B. FRENCH.

LARGE EGGS.—GEORGE W. WHITE, Esq., of North Cambridge, handed us four eggs this morning, which weigh *one* pound. They were laid by the same hen, and three of them in three successive days.

Mr. GEORGE HAYES, of North Cambridge, and one of the best farmers of Middlesex County, is the owner of the Biddy, and possessor of the secret of

producing eggs that will weigh a quarter of a pound each! When hams are ripe, wouldn't it be a treat to dine with Mr. Hayes!

For the New England Farmer.

LITTLE THINGS:

OR, A WALK IN MY GARDEN.....NO. 2.

As I have extended my walk, I come up to a patch planted with

SMALL POTATOES.

I apprehend that your correspondents overlook one important principle in discussing this subject. The potato is not a root, but a tuber, an excrescence as it were from the stock. I suppose it to partake somewhat of the nature of a bulb, which will develop itself remarkably under favorable circumstances, essentially the same as any bulbous or tuberous plant. All such plants require a combination of the most favorable circumstances for their complete development. Plant large tubers and a drought may produce small ones, but I do not see as their capability of reproducing large ones the next year can be seriously impaired; but follow up the plan, and it must be an exception to nature's operations, if in a series of years the product be not dwarfish.

I have suffered severely for three years past, by planting small potatoes. It has so happened that we have had a severe drought soon after planting, which has impaired the vitality of the plants exceedingly. They came up looking feebly, and never recovered the shock. The same remark applies to cutting out the eyes. If correspondents will bear this fact in mind, it may reconcile some of their conflicting testimony.

I remember hearing my father relate an experiment which he made about the year 1812. He bought a bushel of potatoes, which were harder to pay for at that time, than twenty-five bushels would be to a young farmer at the present day. He took a pointed penknife and cut out the eyes so as to diminish the bushel about two quarts after the operation, and planted them on burnt land, and harvested thirty-four bushels of handsome potatoes.

After all, I like what my neighbor, the Captain, says: "I like to plant the same kind of seed as I would raise."

Possibly you may remember some experiments which I communicated to the *Farmer*, on protecting

PEACH TREES.

I varied the experiment of protecting them last winter to ascertain how much exposure they would bear. I tied the limbs together and wrapped round them a single turn of furniture matting. One of them had a foot of the top extending exposed above the matting. The trees came out bright as you could wish for, although the thermometer was down to 37° below zero once during the winter, the lowest ever reached in this place. It was curious to see how effectual the protection was, for the portion of the tree exposed above the matting was killed just to it, and no further. I consider the question settled in regard to protecting the peach in this latitude, after a trial of seven years. The only question with me is, how they shall be treated so as to bear.

A step further brings me to the

CHERRY TREES,

which have suffered severely the past winter. There is a lesson yet to be learned in this vicinity on this point. It will never do to rely on the catalogues of nurserymen in this particular. We want some varieties that will stand our winter, without protection. I know of none to be relied on, except the common Kentish or Pie cherry, which is perfectly hardy here. I wish some correspondent would tell us what to do here in Maine. I was astonished to see such splendid cherry trees in Nova Scotia, while recently there; they were large, and so glossy that you could almost see your face in the bark. One man sold cherries from his garden last year to the pretty little sum of one hundred and twenty dollars.

N. T. T.

Bethel, Me., July 20, 1855.

For the New England Farmer.

INCREASED ATTENTION TO AGRICULTURE,

AND ITS CONNECTION WITH CHEMISTRY.

BY JOHN GOLDSBURY.

Agriculture, for a long time, was almost wholly abandoned, and continued to be neglected, till the introduction of the feudal system in the fifteenth century. This gave every man a distinction and rank according to the quantity of land he occupied. Nothing contributed more to give an importance to agricultural pursuits, than the introduction of this system, which gave the tenant who cultivated the soil, as well as the landlord who owned it, political privileges which were enjoyed by no other members of the community.

Notwithstanding all this, England has done more for the advancement of agriculture, during the last fifty years, than during double the amount of years in any preceding period of her history. She has always been engaged in war. Her history is made up of little else but accounts of sieges, of battles, and of conquests. While she has been so much engaged in foreign and aggressive wars,—while, in the language of her own statesman, "she has been carrying her arts and her arms to the four quarters of the globe," she has left her own soil at home, uncultivated and unproductive. Within the last fifty years, she has given more attention to agriculture; and her efforts have been crowned with success. She has more than doubled the amount of her agricultural productions.

The same remarks apply as well to the French; nay, they apply with more force to the French than they do to the English. For the French have had an equal amount of wars to carry on, while they have suffered more from the effects of bad government. Since the revolution, they have made some advancement in agriculture, but are still far behind Great Britain, notwithstanding they have a climate and soil adapted to every variety of vegetable growth. In all parts of the continent of Europe, increasing attention is paid to this subject. In Lombardy and Flanders, it is carried to the highest state of improvement.

In all parts of the world, increased attention has been paid to the cultivation of the soil. In the old and new world, and in both hemispheres, men are beginning to see, that an all-wise Creator has decreed that plants and animals should derive their subsistence chiefly from the soil, and that all the el-

ements of vegetable and animal matter are to be found in the soil. What these elements and ingredients are, it is the province of the chemist to inform us. The chemist has given us all the knowledge he has on the subject; the air and the water, the soil and the subsoil, have each a part in their possession, and should each be made to contribute a share. Nature, in the production of a perfect plant, does not restrict herself to the animal, vegetable or mineral world. It is highly probable that the newly-created world was, at first, entirely a mineral mass of matter, from which vegetables soon grew abundantly enough to support all animated nature. Geologists generally suppose the action of the elements for an indefinite length of time, was necessary to fit it for the abode of plants and animals; but it is believed that the action of the frost, with the winter's rain and snow, is a powerful fertilizer in this climate; and that fall plowing, and, occasionally, deep plowing, should go together.

Farmers are beginning to see, that the continual cropping and carrying off the products of the soil, year after year, without making any returns by manuring and enriching it, tends to exhaust the soil. Plowing and harrowing, stirring and pulverizing the soil are not alone sufficient to restore the properties which have been taken away by the crops. In addition to these, lime, potash, phosphate of lime or bones, common wood ashes, soot, salt, saltpetre plaster of paris, and human excrements, should be mixed with the soil in different proportions, according to the nature of the soil. Besides, the farmer can find, sometimes by the roadside, and always in swamps, a rich deposit for the supply of food for his plants. The business of composting manure by the use of muck and other ingredients, such as green vegetable matter mixed with mineral substances, is of the highest importance to the farmer.

Chemists have analyzed almost all the useful vegetables and fruits, and ascertained the exact proportion of all the elements which enter into the composition of each. Their method of analysis is, first to dry, then to weigh, then to burn and weigh the ashes, and then to analyze the ashes. The ashes are supposed to contain all the mineral substances which vegetables draw from the earth; and these substances must be restored to the earth in some way or manner, in order to secure a good crop afterwards, especially if it be of the same kind. For if this abstraction from the soil of certain properties goes on year after year, for considerable time, the soil will become exhausted and unproductive. The mineral substances found in plants must first exist in the earth, and must come from the earth; otherwise the plants cannot grow there.

Chemists have not only analyzed almost every article used as the food of animals and of man; but, also, every part of the animal body,—the bone, the muscle, the fat, the milk, the skin, the horns, the hoofs and the hair. These are all formed from the food which animals consume, and are consequently all drawn from the earth. And when we consider the numbers of cattle, sheep, horses, hogs, poultry, &c., which have been driven or carried away from the country to some distant market, no part of whose bodies has been returned to the same soil to preserve its fertility, we are surprised, that the soil from which so much has already been subtracted, should continue to produce so much as it does. This continual skimming of the soil and carrying off the crops, is the reason why the once rich and prolific soil of Virginia is now in many parts no longer able to raise its former staple productions, wheat and tobacco; while, on the other hand, China, which has existed many thousand years, continues to be as populous and productive as ever, because she exports nothing, and wastes nothing that is derived from the earth.

SONG OF THE HARVESTERS.

We gather them in—the bright green leaves,
With our scythes and rakes to-day,
And the mow grows big, as the pitcher heaves
His lifts in the swelt'ring bay.
O ho! a field! for the mower's scythe,
Hath a ring as of destiny,
Sweeping the earth of its burthen lithe,
As it sings in wrathful glee.

We gather them in—the nodding plumes
Of the yellow and bended grain,
And the flash of our sickle's light illumes
Our march o'er the vanquished plain.
Anon we come with the steed-drawn car—
The cunning of modern laws;
And the acres stoop to its clanging jar,
As it reeks its hungry jaws.

We gather them in—the mellow fruits
From the shrub, the vine and tree,
With their russet, and golden and purple suits,
To garnish our treasury.
And each had a juicy treasure stored
All aneath its tainted rind,
To cheer our guests at the social board,
When we leave our cares behind.

We gather it in—this goodly store,
But not with the miser's gust,
For the Great All Father we adore
Hath but given it in trust:
And our work of death is but for life,
In the wintry days to come—
Then a blessing upon the Reaper's strife,
And a shout at his Harvest Home.

For the New England Farmer.

SOURCES OF PLEASURE FOR THE FARMER.

Mr. Brown: — How pleasant, during the long winter evenings, when the cattle are all housed and perfectly cared for, and the work of the day is done, to sit down in the old arm-chair, before the bright fire, with happy faces around you, and such papers as the *New England Farmer* to read. What if the storm-king does reign without? Our hearths are secure—we fear it not. The summer shall chase it away, and the calm shall succeed it.

During the long evenings, or in leisure moments, I love to snatch a paper or book, and pore over the thoughts of others, and weave the rich gems of thought and bright figures into my own web of knowledge. And I love to read the Book of Nature too, and receive her lessons, fresh and at first-hand. And thus her teachings may not be distorted by ignorance or prejudice—the channels through which they sometimes come.

I often feel as though I would take my pen and give you some of my musings, as I pore over the leaves of Nature's own book. I think it well that the farmer should be a reading man, but he should be a *thinking* man, too. It is not safe for him to trust entirely to the thoughts of others. Nor should

he be dogmatical in his own views. Books and papers are like crutches and spring carriages to the mind. He who suffers himself continually to be carried about by them, may always be lame and weakly, but never the hearty robust, strong man, like him who walks. The proper ground for the farmer, as well as all others, to stand upon, is a *dignified independence*, that accords to others the right of thinking for themselves, and claiming and using the same right in return. There is too much dogmaticism on the one hand, and credulity on the other. It may be difficult to steer clear of *breakers*, but it is worth the while trying.

If the farmer would keep his eyes and ears wide open—cultivate and discipline his powers of observation, and learn to *think for himself*, as well as to make just discriminations respecting the thoughts of others; he might save himself much time and trouble, and be the happier for it. J. T. W.

Marlboro', N. H., 1855.

For the New England Farmer.

SMALL POTATOES FOR SEED.

FRIEND BROWN:—Feeling deeply interested in the subject of agriculture and its kindred pursuits, I propose, through the columns of your widely-read journal, to furnish a fact or offer an opinion, now and then, upon matters therewith connected. Should this meet your approval, it may be as well to commence while the *resolve* is upon me.

And first—are small potatoes equal to large ones for the purpose of reproduction? I can, by no means, agree with your correspondent, S. P., in his course of reasoning on this subject—to my mind, much of it is not only fallacious, but pernicious in the extreme.

The wise axiom, "that there is but one right way to do a thing," will hardly be found, as he contends, contradicted by the workings of nature. Nay, I fancy it can be there verified to a demonstration. It is quite true, that at times, she performs her offices in different ways—as instanced in the reproduction of the potato. But can we infer from this that the way pursued is not in each instance "the one right way," since the means employed are ever the best adapted to the end in view? Or shall we conclude that, since Nature is not limited in her operations to a single way, any way by which man can accomplish his purposes is equally as "right" as any other? It would hardly be thought much out of the proper course for nature to produce potatoes from the seed, since it would answer her ends as well. But it might be viewed in a very different light in the farmer, as it could hardly serve his purpose at all. Possibly it will require no very great power of argument to convince even the most obtuse, that in this particular case, at least, there is a "one right way." That there is in every case, is equally certain, and constitutes, no less in farming than in every other pursuit of life, a great truth seldom lost sight of but with mischievous results. I am far from certain that S. P., after all, is not equally sensible of its importance, since he lays it down as a "great principle," "that the farmer depends upon facts wholly." Now facts are only useful to those who hold to a "one right way," and are seeking it by the light of experience.

As to the employment of small potatoes for seed: We should in this, as in all other things, conform to the laws of nature. Now, it is clearly a law of nature, "that the larger and more fully developed the seed, the more thrifty and vigorous the plant, all other things being equal." Who shall say, then, that the same law does not govern plants that are propagated by tubers? Nay, is not the reason for this result much more obvious in the one case than in the other? But, says S. P., we want facts, not speculations! True, and yet the knowledge of facts is, in a very great degree, the fruit of speculation. The science of agriculture, like that of chemistry, is eminently experimental, and experiments are wholly the results of speculation. But to the point. There is one fact which he insists upon, that, to my mind, is quite essential to a right understanding of this matter, and conclusive against him. Namely, "that large tubers are of artificial growth." This is unquestionable as to potatoes, their present size being the result of a gradual development under cultivation,—which cultivation consisted in part of a *constant selection of the larger tubers to seed from.* The seed of the potato produces tubers perfectly matured and of full, *natural* size, the first year, but it requires several years of careful culture, and a constant selection of the larger and more fully developed tubers for reproduction, to bring them to perfection. And then, as he very justly observes, there is a constant tendency to revert to their original type. Now, it must be obvious from these facts alone—the artificial growth of the large tuber, and its tendency to revert to its natural state,—*that the immediate product of small potatoes can never equal that of large ones, with similar culture.* This may be all a matter of speculation, but it is so legitimate and logical a deduction from his own facts, that I have faith to believe that even S. P. will consider it conclusive.

This "small potato doctrine" has not even the poor merit of novelty. It originated very possibly with the first "planter," and, appealing to the cupidity of man, has out-lived a host of fallacies, far less preposterous or pernicious. For years it has shed its blight over our agricultural interest. For years paralyzed to a great extent the best exertions of the true friend of the husbandman. The "old fashioned farmer" as he delights to style himself, clings most tenaciously to his belief in "small potato" seed, and indeed in small potato stock, "*as no less perfect in respect to vitality and the specific character of its several species,*" and consequently, equally as good for the immediate purpose of reproduction. A fatal mistake, let who may entertain it. A dangerous heresy that must be rooted from men's minds ere we can look for any marked improvement in agricultural pursuits. Let this be a great purpose with your journal. Teach only the "one right" doctrine—that the never varying essentials to good crops and success in husbandry, are good soil, natural or artificial—good seeds, good tools and good culture. Let the precept be worked out in the practice, and the time will come when in our less favored clime, and upon our sterile soil, shall grow up a system of agriculture such as the world has never seen. L. P.

East Woburn, Aug. 3, 1855.

GRASSHOPPERS.—The editor of the *California Farmer*, in his journal of July 13, states that grasshoppers are exceedingly numerous and destructive. He had seen one that measured from three and a half to four inches in length!

THE PEACH APRICOT.

The delineation above is from a specimen gathered in our garden about the tenth of August. The largest sample of the fruit is about four inches in circumference, roundish, rather flattened, and somewhat compressed on its sides, with a well-marked suture. Skin yellow in the shade, but deep orange, mottled with dark brown, on the sunny side. Flesh of a fine yellow saffron color, juicy, rich and high-flavored. Downing says:

"The apricot is one of the most beautiful of stone fruit trees, easily known by its glossy *heart-shaped* foliage, large white blossoms, and smooth-skinned, golden or ruddy fruit. In the fruit garden it is a highly attractive object in early spring, as its charming flowers are the first to expand. It forms a fine spreading tree of about twenty feet in height, and is hardy enough to bear as an open standard south of the 42° of latitude of this country.

USES.—A very handsome and delicious dessert fruit, only inferior to the peach, ripening about midsummer, after cherries, and before plums, at a season when it is peculiarly acceptable. For preserving in sugar or brandy, for jellies, or pastries, it is highly esteemed, and, where it is abundant, an admirable liqueur is made from the fruit; and it is also dried for winter use.

CULTIVATION.—This tree is almost always budded on the plum stock (on which in July it takes readily,) as it is found more hardy and durable than upon its own root. Many American nurserymen bud the apricot on the peach, but the trees, so produced, are of a very inferior quality—short lived, more liable to diseases, and the fruit of a second-rate flavor. Budded on the plum, they are well adapted to strong soils, in which they always hold their fruit better than in light sandy soils.

Apricots generally grow very thriftily, and soon make fine heads, and produce an abundance of blossoms and young fruit; but the crop of the latter frequently falls off when half-grown, from being stung by the plum-weevil or curculio, to which the smooth skin of this fruit seems highly attractive. Seedling apricots are usually more hardy and productive here, than the finer grafted sorts.

This is a favorite tree for training on walls or espaliers, and, in town gardens especially, we often see it trained against the sides of brick houses, and yielding most abundantly. As the apricot, however, expands its blossoms very early, it should not be placed on an east wall, or in a situation where it is too much exposed to the full morning sun."

For the New England Farmer.

THE CORN CROP.

MR. EDITOR:—In my summer rambles about the country, no one object has afforded me more gratification than the appearance of the corn crop. Not only does that crop exhibit a high state of promise, but it seems to me that a much larger aggregate breadth of soil than usual has been applied to it the present season. This, in the face of the partial failure of last year from the drought, indicates that the value of the corn crop is compelling a proper appreciation from our farmers, despite of the seeming heavy labor of its cultivation. I rejoice at this; for I honestly believe that, with the decline of the corn crop, we may date the decline of the great interest of agriculture in this country.

When I see a farmer figuring up the expense of cultivating corn, and declaring that every bushel he raises costs him more than it comes to—that he can buy it cheaper than he can produce it—I set him down as a man in great danger of cultivating a too intimate acquaintance with the sheriff. It is true that the proper adaptation and manuring of the soil for corn, the hoeing, the harvesting, the husking and the shelling of the crop, ordinarily involve a good deal of labor; but then it should be borne in mind that no other crop so well subdues the land, or leaves it in so good a condition for other crops—that none affords such indispensable food for both man and beast, or can be adapted to so many purposes. When hay is twenty dollars a ton, the stover from the corn-field is no small item in the feed of cattle, to say nothing of the one or two tons of pumpkins per acre, which may be raised along with the corn without sensibly diminishing the latter crop. All observing farmers agree also, that not only Indian meal, but the stover of corn, constitute the very best food for cattle, and especially for cows in milk. The milk, the butter, and the cheese, made from "corn feed," are always superior to those made from any other; and it is not necessary for me to say one word as to the superiority of "corn-fed pork," for everybody knows of it.

Again, corn is the *safest* crop that can be cultivated. Potatoes may rot—wheat may be destroyed by the fly, the midge, the rust, the drought, or by too much wet—rye may "winter-kill," and oats may blast—but corn does not fail, on an average, once in twenty years. There may be partial failures from drought or frost, but anything like a total failure has occurred but once in New England within the present century, and that was during the cold season of 1816. Last year there was very nearly a failure of this crop in some of the western States; but if the newspaper accounts may be relied on, the aggregate crop of the present season, all over the country, bids fair to atone for the deficiency of the last. This is the brightest indication of the times; for the prosperity of the country has become so far identified with corn, that even the failure of cotton could scarcely affect it more. The aggregate corn crop of the present season, from present appearances, will be much greater than ever before; it may reach the enormous amount of from six to eight hundred millions of bushels—and yet, I venture to assert that not one of those who have contributed to swell this great aggregate is the poorer for having cultivated corn. It is all nonsense to say that the crop, in any case, "costs more than it comes to."

As to the best mode of harvesting corn, I will say a few words. Where the saving of the stover is an object—and I do not know the place in New England where it is *not* an object—nearly all good practical farmers agree that the best way is to cut it up as soon as the ears are out of the milk, and while the leaves and husks are green, tie it in bundles, and place those bundles in "stooks" to cure. As soon as they become dry, the corn may be husked, and the stover stowed away in the barn; and, thus cured, the cattle will eat it at any time in winter in preference to the best English hay. One good farmer tells me that the stover of his corn-field is better than a ton of hay per acre, and that it very nearly pays for the labor of cultivating the crop, from the fact that such labor interferes very little with the time necessary for haying, and for harvesting other crops. Besides, he says, *any* other crop, be it grass, grain, or potatoes, will rotate with a corn crop better than with any other.

As for the varieties of corn best adapted to particular localities—not to particular soils, for corn will grow with manure on any soil—there need be little said, for this grain has a wonderful faculty of adapting itself to almost any climate. The large southern corn, if planted at the North will gradually become smaller, until it attains a growth adapted to the climate; and northern corn, planted at the South, undergoes a corresponding change there. It is true, however, that the varieties may be somewhat ameliorated. In a recent number of the *Farmer*, in answer to a correspondent, you stated the "Early Jefferson" to be the earliest corn. Now I have cultivated for years the common kind of yellow "eight-row" corn, made earlier than usual by a fortnight, by a farmer in Vermont, who for eight years in succession plucked the very first ripening ears in his field and preserved them for seed. I always have green corn of this variety from the middle to the twentieth of July; and year before last I gathered a quantity of perfectly ripe ears on the 5th of August. It is not "sweet corn" in the usual acceptation of the term; but it is much sweeter and more palatable for cooking green than the "Early Jefferson;" which latter, in fact, is hardly worth the cooking. This early variety of mine would be invaluable for cultivating in more northern latitudes, for three months of good weather are all that is wanted to grow and ripen it.

I am inclined to think that there is no very great difference in the varieties of corn, in regard to the

yield per acre. The large "tree-corn" of the South and South-west, where a man is obliged to stand on tiptoe to reach the ears, seldom, I am told, yields more than fifty bushels to the acre. In the great corn-growing Scioto Valley, fifty bushels to the acre is considered a large average crop. And yet I once knew *one hundred and thirty-one bushels to the acre*, of common eight-rowed yellow corn to draw the first corn premium at the fair of the agricultural society in Rutland County, Vermont. This, to be sure, is something extra; but fifty bushels to the acre is by no means a crop to brag of, even in what is usually called the sterile soil of old Middlesex. I have raised nearly as large a measure of ears on a square rod, of the common white pop-corn, as of any other; because, though the ears are much smaller, the hills will bear planting much nearer together, and the average number, per stalk, of this variety, is much greater than will hold good of the larger varieties. And by the way, I would recommend a much more extensive cultivation of this variety. The oleaginous matter which it contains, and which causes it to "pop" so freely, renders it very valuable for the fattening of fowls, while "popped corn" is the simplest, lightest, cheapest, and most nutritious form of unleavened bread known to the world. No family, in these days, ought to be without a "corn-popper."

I could write for hours upon the advantages to our farmers of entering more largely into the cultivation of maize, and then scarcely satisfy my own feelings on the subject. I do not expect others, however, to partake of my enthusiasm, and so I forbear; and will close by an affirmation, of which I challenge the disproval. It is this: *No farmer ever yet cultivated too much Indian corn.*

Somerville. E. C. P.

For the New England Farmer.

HAY CROP.

Notwithstanding the long-continued growth, and the luxuriant appearance of the fields, there is much reason to believe that the amount of hay actually secured in condition to be used, will come short of a fair average of the crop for the last ten years. This is true, so far as my observation has extended in the eastern part of the State. The check put on grass, by the extreme drought of the last year, in many fields, will not be overcome until the land is re-seeded. When the plants are once killed, no fertilizing application will cause them to sprout again. If we do not mistake, an injury of twenty-five per cent. to most of our fields happened in this way.—Then, it will be remembered that the early spring was peculiarly unpropitious to the starting ahead of this crop. Very few fields were grown sufficiently to be cut on the 4th of July. Generally they were ten days, at least, behind at that time. And subsequently, when cut, it took four days or more to make it, as is usually done in two, in fair weather. Taking into view all these circumstances, and the empty condition of the mows in our barns at the present time, it is fair to say, that the crop is considerably less than average.

We have been led to these reflections on the crop of hay, from the interest we had felt in facilitating the labor of cutting it. We had persuaded ourselves that one-half of this labor, at least, might be saved, by the proper introduction of machines, to be operated by horse or ox power. Whether the result will come up to our expectations can only be determined, when a full detail of the experiments made shall be presented.

This is certain, where one and a half and two tons of hay to the acre was calculated on in the spring, but little more than one ton has as yet been realized. Whether this deficiency shall be supplied by the *second crop* and the superabundance of *corn fodder*, will depend much on the vigilance and industry of farmers. ESSEX.

August 10, 1855.

For the New England Farmer.

LITTLE THINGS:

OR, A WALK IN MY GARDEN.....NO. 3.

I do not write about my garden because it is so large, so expensive, or so much better than those of my neighbors, but because every garden possesses its individual interest. Every garden is full of instruction, even that of the sluggard. While taking my walk this morning, I was struck with the

POWER OF LEAVES TO ABSORB HEAT.

I transplanted some cabbages, gave them a single watering, and covered them with leaves of rhubarb, or burdock, which I find much better than repeated watering. The thermometer had been up to 95°, yet the plants did not wilt. What oceans of heat are swallowed up by vegetation in summer! The leaves do not merely evaporate the water by the aid of heat, but they have an apparatus by which water is emitted from their surfaces, which, when disengaged, absorbs a large quantity of sensible heat. A single large maple in open ground will almost always induce a current of air beneath its shade.

Somebody has said, and it has gone the rounds of the papers, that nitrogenous manures are not good for cabbages or ruta bagas. Now I do not believe it. They love such manures, but the trouble is, such manures should be thoroughly incorporated with the soil, and if possible, prepared early in the season. I have for many years preferred this kind of manure to all others, and have almost always beat my neighbor, the doctor, who is a good gardener.

I have a spot sown with seeds from the Patent Office called the

CHAMPION PEA OF ENGLAND.

They look finely, are ready for picking after the Prince Albert, and before the Marrowfat. They have been cultivated for several years by some English families in this vicinity, by whom they are highly prized. I think they are not generally known in this State, but will prove a valuable addition to our culinary articles. *Item.* — Sow the Prince Albert, Champion and Marrowfat, for a succession of productive crops.

Some very silly things have been written respecting the use of

SALT AS A MANURE.

The chief use of salt is alleged to be its power of destroying grubs and worms. Now I would like to know how many bushels, evenly spread over an acre, would be necessary, so as to destroy a single worm? Then, again, it destroys weeds. But so will sulphuric acid, potash, or any other salt, or acid, when used in large quantities, and in a concentrated form. How many bushels of salt to the acre would it take so as to kill any weed whatever?

I will answer. It will take just as much as will kill everything you plant or sow, except such plants as are of marine origin. There is, however, one little experiment which I once made with complete success. I had a spot thickly set with Canada thistles where I wished to make a garden. I manured the ground heavily, sowed with oats, and let thistles and oats grow together. When they were in full bloom, I mowed them pretty high, and with a tin coffee-pot of beef brine I filled up the hollow stocks of the thistles with the same. To some this might seem small business, but I passed over the ground faster than I could hoe it when under cultivation. The result was, that I never saw any thistles grow there afterwards. I close this article by declaring that I design to make my garden supply my table with something fresh the year round.

Bethel, Me., Aug. 4, 1855. N. T. T.

PROPER TIME FOR GATHERING PEARS.

A late number of the *London Gardener's Chronicle* contains an article upon this subject by M. DE JONGHE, of Brussels, a portion of which may prove of service to some of our readers. He says:

Formerly, when the varieties of pears in cultivation were comparatively few, there was little difficulty in knowing the time when each sort ought to be gathered; but now, when the number of good varieties is so much increased, the proper time for gathering the respective sorts cannot be known without a certain experience acquired during a period of from three to five years, in order that a mean may be obtained. For the maturity of the fruit on the tree depends:—

1. On the individual constitution of the tree, and its liability to change.
2. On the soil in which the tree is planted.
3. On the influence of the stock.
4. On the temperature of the season, whether more or less favorable for accelerating the maturity of the fruit.

In order to know exactly the mean period of maturity on the tree of any particular variety of fruit, it is necessary to observe several trees of such variety, planted in different soils and situations. With regard to the varieties of Pears which ripen at the end of summer, or early in autumn, it is not difficult to fix the date when they should be gathered; for, in the same situation, this, in different years, does not vary more than 10 days.

The influence of soil, of stocks and of temperature more or less warm and dry, is not so great on early fruits as on the late autumn, winter and spring varieties. With regard to the summer and early autumn kinds, they cannot always be left to ripen completely on the tree, grown as a pyramid or standard, and it is needless to add that these sorts of fruits do not, in our climate, merit a wall, where, in fact, they are never so good as in the open ground. When a considerable number of fruits is observed to have reached the point of maturity, and when, with a slight pressure of the thumb, the stalk is readily detached, without twisting, at its junction with the spur, a portion of the fruit should then be gathered, and allowed to acquire their full maturity in the fruit-room. This first gathering will ease the tree, and the whole of the nutritive sap will be directed towards the remaining fruits, which, in consequence, become much finer; and these are gathered in the same manner, and successionally.

The operation of successional gathering may be very advantageously followed up, because all the fruits on a tree never ripen simultaneously; and that they may acquire full perfection, it is important that they should be left on the tree to attain the necessary degree of maturity, known to the practised eye by certain signs, which it would be difficult to point out, without entering into tedious details.

With regard to the late autumn, winter and spring pears, the same proceeding is adopted; it is only by successional gatherings that we can hit upon the proper time, and know the happy medium between gathering too early or too late. The gathering of these fruits, in season as above mentioned, commences about the middle of September, and continues till the end of October, or till just before the fall of the leaves.

When some fruits, neither bruised nor pierced by insects, of a late variety of pear begin to drop, although not affected by strong winds nor by drought; and when the leaves begin to turn yellow and fall from the tree, an attentive and experienced person will perceive that the period of gathering is at hand.

The same kind of fruit cannot be gathered uniformly at the same date, owing to various circumstances which influence the ripening; but by successional gatherings, or at intervals, the proper time for different localities is best ascertained; and that, in general, all the varieties ought to be gathered before their perfect maturity, which should be attained in the fruit-room.

For the New England Farmer.

"WHAT CONSTITUTES A COW OF NATIVE BREED?"

MR. EDITOR:—The reperusal of the criticisms of "W. S. L.," as they appear on the pages of the *Farmer* for June, brings to mind the propriety of replying to his inquiry, "*What* constitutes a cow of native breed?" Mr. L. says he understands by *native breed*, one indigenous to the county." That is, born in, or having its origin in the county. If being *born in* makes the animal native, then all the offspring of stock imported, that chance to be dropped in the county, will be entitled to the appellation of native. But if the first origin of the race must be shown to have been within the county, then it is as well to admit, in the onset, that no such thing can be shown; because every one knows that all our animals proceeded from stock imported, at periods more or less remote. So that the remark recently made in your paper is true, that the discussion about *native breeds* resolves itself into a talk about *words*, and *words only*. For this reason, I hope to be excused attempting any further answer.

I am happy in having drawn from my friend so valuable a mass of facts, relating to the stock of the county of Worcester. But he will pardon me when I say, that this statement of *selected and petted animals* goes but a little way towards showing the real character of the entire stock of the county. Possibly my estimate that *nine-tenths* of them were *native*, in the sense of the term, as ordinarily used, may have been extravagant; but from the best estimate in my power to form, by the use of *my eyes* and *my*

ears, wherever I have been, (and I have been in most of the counties of the adjoining States of Maine and New Hampshire,) I have seen no sufficient reason to vary this opinion. ESSEX.

June, 1855.

For the New England Farmer.

FARM WAGES AND LABOR.

MR. EDITOR:—A writer in the last number of the monthly *Farmer* finds himself much troubled on accounnt of the high wages which farm laborers are receiving. I shall attempt to show that good workmen receive no more than a fair equivalent for their labor; if farmers wish to employ idle, ignorant, bigoted laborers, they may do so, and it will continue to be difficult to obtain others. The foreigner when he first arrives, may be hired for small wages, yet he is dear "help;" but after he has learned the ways of the country, he demands and obtains as high wages as the Yankee. Much of the farm labor is performed by machinery, and less hand labor is needed now than formerly, and more intelligent labor is required. The farm workman labors more hours than almost any other, and he is much exposed to the weather. It appears to me that the condition of the farm laborer, working 14 or 16 hours per diem, for $14 or $15 per month, does not compare very well with that of the mechanic, working ten or eleven hours, for $1,50 or $2 per diem. Working "by the month" wears out the strength and constitution, so that no man with average health can expect to hold out longer than to the age of thirty-five or forty years.

Then farm labor is not constant employment, for after the farmer has gathered in the products of the soil, he does not require any extra help until it is time to prepare the ground for another crop; consequently, there is, during the winter, but little employment to be had.

There is so much exposure in farming that young men who commence at the age of twenty-one, without any property, and with the intention of getting a living by working on a farm, and who have an average fortune, usually end a short life as poor as they began it. According to the doctrine laid down by "E. G. L.," wages ought to be low when produce is high; that is, the farmer cannot pay so high wages when corn is $1,25 per bushel, as he can when it is only 75 cts. How is this?

Nothing has been said about that numerous class called day laborers, men having large families to support, and who are compelled to get their living by working out by the day on farms. Employment is far from being constant with them, and their condition is, if possible, worse than that of the mechanic or the laborer for manufacturing companies, for they have great reason to hope that by attending to their business they may get promoted; but the farm laborer can have no such hope; at the age of twenty-one he is in his prime, and commands as high wages then as ever, and considering the short period in which farm labor is really in demand, I think that laborers in that business ought to command the best of pay. E. N.

South Hadley, Aug., 1855.

REMARKS.—We cannot agree with all that "E. N." says in this article, but are quite willing that he shall have a fair hearing.

AGRICULTURAL EXHIBITIONS—1855.

STATE SHOWS.

Alabama	Montgomery, Oct. 23, 24, 25, 26.
California	Sacramento, Sept. —.
Canada East	Sherbrook, Sept. 11, 12, 13, 14.
Canada West	Coburg, Oct. 9, 10, 11, 12.
Connecticut	Hartford, Oct. 9, 10, 11, 12.
East Tennessee	London, Oct. 23, 24, 25.
Georgia	Atalanta, Sept. 10, 11, 12, 13, 14, 15.
Illinois	Chicago, Oct. 9, 10, 11, 12.
Indiana	Indianapolis, Oct. 17, 18, 19.
Iowa	Fairfield, Oct. 10.
Kentucky	Paris, Sept. 25, 26, 27, 28.
Maryland	Last week in October.
Michigan	Detroit, Oct. 2, 3, 4, 5.
Missouri	Boonville, Oct. 2, 3, 4, 5.
New Hampshire	Manchester, Sept. 12, 13, 14.
New Jersey	Camden, Sept. 19, 20, 21.
New York	Elmira, Oct. 2, 3, 4, 5.
North Carolina	Oct. 16, 17, 18, 19.
Ohio	Columbus, Sept. 18, 19, 20, 21.
Pennsylvania	Harrisburg, commencing Sept. 25.
Rhode Island	Providence, Sept. 11, 12, 13, 14, 15.
Tennessee	Nashville, first week in October.
Vermont	Rutland, Sept. 11, 12, 13.
Virginia	Richmond.
Western Virginia	Wheeling Island, Sept. 26, 27, 28.

COUNTY SHOWS IN MASSACHUSETTS.

Barnstable	Barnstable, Oct. 10.
Berkshire	Pittsfield, Oct. 3, 4.
Bristol	New Bedford, Sept. 27, 27.
Essex	Lawrence, Sept. 26, 27.
Franklin	Greenfield, Oct. 3, 4.
Hampden	Springfield, Oct. 3, 4.
Hampshire	Amherst, Oct. 10, 11.
Hampshire, Franklin and Hampden	Northampton, Oct. 10, 11.
Housatonic	Great Barrington, Sept. 26, 27.
Middlesex	Concord, Sept. 26.
Middlesex South	Framingham, Sept. 19, 20.
Norfolk	Dedham, Sept. 26, 27.
Plymouth	Bridgewater, Oct. 3, 4.
Worcester	Worcester, Sept. 26, 27.
Worcester North	Fitchburg, Sept. 19.
Worcester West	Barre, Sept. 20.

TOWN FAIRS.

Lexington	Tuesday, Sept. 25.
Leominster	Wednesday, Sept. 26.

MISCELLANEOUS.

Cheshire County, N. H.	Keene, Sept. 19, 20.
Grafton County, N. H.	Wentworth, Sept. 21, 22.
Hillsboro' County, N. H.	Nashua, Oct. 2, 3.
Mass. Society for Promoting Agriculture	Worcester, Sept. 27.
Rockingham County, N. H.	Keene, Sept. 27.
Sullivan County, N. H.	Sept. 26.
United States Agricultural Society	Boston, Oct. 23, 24, 25, 26.

HOW MUCH MANURE DO WE USE ON AN ACRE?—An acre of land contains 43,560 square feet, 4,840 square yards, or 160 square rods. By those who have used guano, it is said 300 pounds is sufficient to manure an acre; 302½ lbs. would just give one ounce avordupois to the square yard. A cubic yard of highly concentrated manure, like night soil, would, if evenly and properly spread, manure an acre very well. A cubic yard of long manure will weigh about 1,400 lbs; a cubic foot not far from 50 lbs. A cord contains 128 cubic feet; a cord and a quarter would give about a cubic foot to the square rod. If liquid manure be used it would take 170 bbls. to give one gill to a square foot upon an acre, which would be equal to about 50 pipes or large hogsheads. It would be quite useful if farmers would be a little more specific as to the amount of manure applied.

HOW TO MAKE A HORSE CARRY HIS TAIL STRAIGHT.—I had a very fine colt, that carried his tail on one side and was continually throwing it over the driving line, when to cure him of this habit, I braided a loop in his tail and tied it with a string to the trace on the same side on which he carried it, and when he found it was tied, he would pull on it, when I would let him up a little gradually on the sitting until at length he came to carry his tail perfectly straight.—*Boston Cultivator.*

EXTRACTS AND REPLIES.

DRAINING—TRANSPLANTING—WALL-BUILDING—OLD PASTURES—WHEAT CROP.

MR. EDITOR:—For a few years in my "teens" I "worked out" on a farm, after which I followed shoemaking for a living; this proving a detriment to my health, I studied, and have practiced, in the winter, for several years, as a profession, the science of Phrenology. I have had a desire for agriculture for several years, and two years since bought a farm of over 100 acres, and in summer, after a six months tour—from October, each year, lecturing on the above science—I do the most of the work on my cleared land (60 acres) with my own hands, and love it well. I am healthy and happy. I should like to ask about a thousand questions through the *Farmer*, and perhaps shall, in the course of a year.

1st. I have a "swale," or swampy piece, of 7 or 8 acres, that bears upon an average about two tons per acre of hay, when cleared—and some of it has been mowed for forty years—but it is quite wet. Would it be best to underdrain it, or cut a deep, open ditch, or just cut a shallow channel to give course to the surplus water? (*a.*) Some such ground in last summer's drought dried up so that the grass was killed for quite a distance from such a deep ditch. Query: Does not such kind of ground require *much* water to make it productive?

2d. Is the fall a proper time to set out native seedling apple trees, of five years growth from the seed? (*b.*) Will such trees, set out in the fall, and others of the same kind, set out in the following spring, bear alternate years, as some assert? I doubt the correctness of the theory.

3d. Is it the better plan to level the ground where stone wall is to be laid, or should the ground remain unbroken? Some say that if the surface is disturbed, it will heave more than if left unbroken. (*c.*)

4th. Is the best way to improve the feed in old hilly pastures, to harrow them in the fall thoroughly, and sow timothy and clover on them at the time? (*d.*)

Lastly, should ground broken up in the fall be plowed again in the spring, for a wheat crop? (*e.*)

Answers to the above, through the *Farmer*, would much oblige your subscriber,

Glover, Vt., 1855. BENJAMIN BRUNNING.

REMARKS.—(*a.*) Good meadow lands may be injured by draining *too much*. The quality of the land itself must determine how low the water must be reduced below the surface. On compact, heavy meadows, the water may be drawn lower than on those that are light and porous. Some meadows of the latter class are so exceedingly light that when the water is drained from them for the depth of 18 or 20 inches, they will burn, on taking fire, like stacks of peat, and be rendered nearly worthless.

Examine with care those parts of the meadow, along the edge of the upland, where good grasses grow luxuriantly, and see by digging what the state of moisture is there at various seasons of the year, as this may afford suggestions which will be of service to your operations.

(*b.*) Yes. Set them soon after the leaves have fallen, and throw the earth about their stems 8 to 12 inches high. We do not believe in the alternate year theory.

(*c.*) If you mean to have a stone wall remain where you place it, and stand the test of frost and time, dig a trench three feet wide and two deep, and fill it with small stones, if you have them in abundance. If not, the depth may be less. A wall well-built on such a foundation, will stand a hundred years.

(*d.*) Pastures may be greatly improved in the manner you suggest; but whether that is the *best* way, or not, we are not able to say. Pastures often fail for want of seed, even when the soil is in pretty good condition.

(*e.*) If the land intended for wheat is sward, it would not be best to disturb it in the spring, because it would be very expensive to break and pulverize the sods which were turned under the previous autumn. Plow with a light, one-horse plow, or work with a cultivator as deep as you can, without reversing the sods.

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RYE—WEEDS.

FRIEND BROWN:—I wish to inquire through the *New England Farmer* what is the best time for sowing rye, and what manures are best adapted for it? I have lime, plaster and compost. Will rye do well, two or three crops in succession, on the same ground?

What will, if anything, kill a weed known here by the name of Jacob's Ladder? I have tried every thing I can think of, but to no effect. Any light on the subject will oblige many young farmers, and I presume old ones, too. W. R. S.

Petersburg, Aug. 6, 1855.

REMARKS.—To ensure a good crop of rye, it should be got in as early as the middle of August; it will then have time to make strong roots, and will resist the effects of winter much better than when the roots are young, tender and feeble. The kind of manure best adapted to the crop, depends in a great measure upon the kind of soil upon which the crop is placed. On the light, sandy soils upon which rye is usually grown, a good compost of meadow muck and barn manure would probably be better than lime, plaster, or any of the common stimulants, such as guano and superphosphate. If the meadow muck had been mixed with lime, thrown into a heap, and remained a year, it would be still better for it.

Nothing short of never-tiring perseverance will destroy some of the weeds which infest the farm. Several years since a patch of chiccory made its appearance in one of our mowing fields, and was promptly dug up with a spade, but soon appeared again. That process was repeated six or eight times, but still it grew. It was then cut off just below the surface, and a handful of salt applied to the bleeding wound, but this did not kill them. This summer they were allowed to grow until the seed bolls began to form and then they were

pulled up, some of them requiring the strength of two men to accomplish it. To-day they have broad, luxuriant leaves, and are growing as vigorously as ever. Now, friend "S.," if you will tell us how to destroy chiccory plants, we will offset such service by informing you how to kill "Jacob's Ladder."

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HOW TO USE MUCK.

Will you give me the best way of using muck on my land? My farm is situated on a rising piece of land, and is mostly sandy loam. I have just commenced farming for myself, and hope to be, sometime, a practical and thorough tiller of the soil.—Crops for the most part are backward in this section of the country, but are growing fast, and look promising; the hay crop seems more abundant than last year. JAMES F. BUTLER.

Monmouth, Aug., 1855.

REMARKS.—After the muck has been dug one year, mix it with ashes or lime, and use it in that way on your sandy loams. The best use of muck, however, is as an absorbent. Always keep a good stock near your manure heap, and as the droppings of the leanto are thrown down, cover them with the muck once each day; no labor that you perform will pay you better than this. You not only get the addition of the muck, but it absorbs the volatile gases of the manure, and lays them up for future use.

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WINTER WHEAT.

GENT.:—In your paper of Aug. 11, I find an article on "winter wheat," which contains information new to me; and, inasmuch as I have a good quantity of such land as is mentioned in said article, I feel disposed to make a trial of the winter wheat, provided I can find the seed. Can you tell me where, and for what price, it can be had? If so, by giving the information in your next paper, or as early thereafter as your convenience will admit, you will confer a great favor on a SUBSCRIBER.

Winchendon, Aug. 14, 1855.

REMARKS.—Winter wheat may be found at the agricultural warehouses, and the price will be, probably, somewhere between $3 and $4 per bushel.

For the New England Farmer.

POTATO CROP.

MR. EDITOR:—An observing cultivator informs me, that since the late abundant rains, he has noticed unmistakable indications of disease and decay on the vines of his potatoes. Appearances, like those in years past, when the potato was destroyed by the *rot*. If this be true, and I know no reason to doubt, it is a fact worthy of notice, in several points of view—both as it will affect the supply of this most useful article of food, and as it may be indicative of the cause of the malady that has heretofore been so alarming.

Never has the prospect of potatoes been more encouraging than for a month past. The general remark has been—"never did potatoes look better," and "there is no indication of rot." And further, never have we known potatoes appear to better advantage when brought upon the table than the present season. I am no alarmist, nor have I any disposition to increase the price of this almost necessary article of food. In proof of this, I will say, that within a week, I have known a contract to supply one hundred bushels of potatoes of prime quality, as taken from the field, at *forty cents* per bushel.

Aug. 14, 1855. SOUTH DANVERS.

UNITED STATES AGRICULTURAL SOCIETY.

We call attention to the following Circular, which will make known the objects of the Society, and hope all who are interested in the noble art of Agriculture—and who is not—will make this Exhibition a personal matter, and give it all the influence in his power to render it, in all its departments, superior to any enterprise of this kind which has ever taken place in this country. There are none, whatever business or profession they may be engaged in, but may be benefited, directly or indirectly, in the success of such an Exhibition. Not only the best Stock may be presented, but we see no objection to exhibiting farm implements, specimens of fruits, grains, bees and bee-hives, preserved fruits, and everything else having immediate reference to the farm. We do not know that it is contemplated that anything beside Stock shall be introduced, but suggest, and earnestly desire, that other articles may be allowed a place for Exhibition, even if no premium is offered on them.

We trust that New England will do her whole duty in this noble enterprise. That the hills of Vermont and Berkshire, the valleys of the Connecticut, the Merrimack and the Penobscot, and the plains of the Cape, will all send their products to this grand gathering of the people, with the noble specimens of their industry and skill.

A GRAND NATIONAL EXHIBITION OF STOCK—Horses, Cattle, Sheep and Swine—open to competition to all the States of the Union, and to the British Provinces, will be held by the United States Agricultural Society in the City of BOSTON, Oct. 23d, 24th, 25th and 26th. Twenty Thousand Dollars have been guaranteed by patriotic gentlemen of Boston and its vicinity to defray the expenses; the City of Boston has generously granted to the Society for present use, a fine public square of fifty acres; and $10,000 will be offered in premiums in the various departments.

The previous Exhibitions of this Society—at Springfield, Mass., in 1853, and at Springfield, Ohio, in 1854—were eminently successful, and no efforts will be spared to render the present SHOW, combining as it does the four great departments of FARMING STOCK, superior to its predecessors. The Premium List, with the Rules of the Exhibition, will be forwarded to all who will address the President or Secretary, at Boston, to that effect. It is earnestly hoped that all breeders, and owners of Fine Stock, will feel it to be a duty, as it certainly is for their interest, to contribute to the Show.

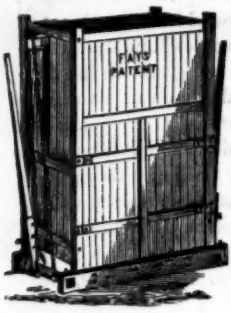
The List of Entries, Exhibitors and Award of Premiums, and all the proceedings of the Exhibition, will be published in the JOURNAL of the So-

CIETY for 1855. Annual members of the Society, who desire to receive the Journal, should remember to renew their subscriptions.

MARSHALL P. WILDER, *President.*
WM. S. KING, *Secretary.*
Boston, Aug., 1855.

Fay's Portable Hand-Power Hay, Cotton and Cider Press.

This machine, the simplicity of which cannot be surpassed, has long been desired by the agriculturist. It is admirably adapted for pressing hay, cotton, hemp, wool, rags, pumice, linseed oil, &c., &c. Notwithstanding its small proportions and extraordinary lightness, it is strong and effectual, sufficiently so to press to any compactness required. It is so simple in its construction and use, that any person of ordinary capacity will readily understand the mode of using it; with common care, one machine will last a life-time; for convenience and strength, the frame-work is all secured together with joint bolts, only twelve of which are required to be removed, in taking apart for shipment, viz: four post bolts which secure the top work to the bottom, and four bolts upon each side, which secure the end work to the side joints; the doors being previously unshipped, you have the two end pieces, two side pieces, and bottom work, which are easily carried by hand.—Two persons will put the whole together in a few minutes.



The press being worked by hand power, can be used advantageously in stormy weather, within closed doors, whereas in operating with horse power, doors require to be more or less open.

For sale by the patentee's agents, NOURSE & Co., No. 9 Commercial Street, Boston.

LADY'S DEPARTMENT.

OUT-OF-DOOR EXERCISE.

Every woman, every fashionable woman even, has a heart at least considered as the organ of circulation; and blood-vessels, on the healthy play of which depends the bloom of her face, and which will not play healthily without out-of-door exercise. She has also muscles and ligaments, which have to brace her up, hold her together, and keep her clean-limbed, but will do nothing of the sort for long, unless they are maintained in proper tension by the same means. Let her loll about all day in a close "muggy" house, instead of exerting herself for a due time in the fresh air, and she quickly begins to droop and look unwholesome. Soon her complexion fades or grows discolored, her features are puffed or shrunken, her form either wastes or swells, she gets either haggard and lanky, or round and fat; her figure tumbles all of a heap; her ankles give out, her feet spread and flatten; her elastic step becomes a waddle; and her person altogether acquires the style of a cow. Brilliant eyes, on the other hand, complexion to match, features retaining the chiselled outline, a slim and smart figure, neatly turned ankles, finely-arched insteps, are the reward of walking or riding out at a good pace, and for a reasonable distance, every practicable day. And by these means is preserved for many a year a contour, the cut of which resembles that of the doe or the gazelle. At no period of the year is any healthy young woman, of whatever station, obliged to exchange out-of-door recreation for in-door amusement, except when it hails, or rains, or snows, or thunders or lightnings, or blows a hurricane. Are there not furs? never mind the expense: the war with Russia has not made them dearer than the attendance of a simpering doctor. Are there not muffs, and boas, and all sort of water-proof armor? Young ladies, take the advice of your elders, and, as the old woman says, "Get out!"—in all tolerable weather. As to necessary in-door amusement, mind, it may also be made conducive to beauty by being rendered in some degree intellectual. Intelligence adds considerably to the lustre of the eyes, which, without it, have only the glitter of glass beads, whilst the best-shaped and most splendidly-colored face which they can be stuck in, resembles that of a waxen dummy in a hair-dresser's shop. In order, therefore, to attract admiration, ladies of fashion would do well to cultivate intelligence, to some extent, by way of in-door amusement. Beauty may be called a fading flower; but it is a flower that will fade very much the sooner for being taken in-doors for the winter like a geranium.—*Water Cure Journal.*

CONVENIENT AND WHOLESOME FOOD.—A very cheap, convenient, and palatable dish may be prepared with the common pilot bread, which is a hard, dry cracker, made of flour and water. These can be purchased by the barrel at a price but a little higher than flour, pound for pound, as they are generally made by machinery, and the cost of making and baking is but trifling when it is done on a large scale. We see the price of pilot bread is quoted in this market at less than half a cent per pound above good flour, and as they are nearly as dry as flour, they are about as nutritious. They will keep longer than flour without deteriorating or becoming stale. They can be used in a variety of ways, such as putting them into stews of meat, or meat and potatoes; they improve "hash" materially, and are a good substitute for "crust" in pot-pie, having the advantage of always being light and wholesome. For an ordinary, every-day dish, put them into an oven after the bread is removed, or into a stove oven, and let them dry thoroughly; then break them up and pour boiling water over them, and add a little salt, and butter, cream or milk. We know of no more easily prepared, more wholesome, and more palatable dish than this, for the breakfast, supper, or even for the dinner-table. *American Agriculturist.*

Afflictions are the same to the soul as the plow to the fallow ground, the pruning-knife to the vine, and the furnace to the gold.